

REQUEST FORM FOR FILING A CONTINUATION APPLICATION  
UNDER 37 CFR 1.53(b)

Docket No: 3350-31G  
Client Ref: BillPayG

Total Pages: 59

Prior Application: S/N 09/250,675  
Expected Art Unit: 2764  
Expected Examiner: R. Weinhardt

Box Patent Application  
Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

This is a request for filing a continuation application under 37 CFR 1.53(b), of pending prior application Serial Number 09/250,675, filed February 16, 1999, titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS" which is a continuation of Serial Number 08/372,620, filed January 13, 1995 (now U.S. Pat. No. 5,873,072) titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS, which is a continuation of Serial Number 07/736,071, filed July 25, 1991 (now U.S. Pat. No. 5,383,113), titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS" by the inventor(s) named below.

INVENTOR	RESIDENCE	CITIZENSHIP	POST OFFICE ADDRESS
Peter J. Kight	Same as Post Office Address	USA	9300 Chandler Bluff, Alpharetta, Georgia 30022
Mark A. Johnson	Same as Post Office Address	USA	6554 Drive, Dublin, Ohio 43017
Tamara K. Christenson	Same as Post Office Address	USA	475 Forestwood Drive Gahanna, Ohio 43234
Regina Lack	Same as Post Office Address	USA	7540 Cheshire Road Dublin, Ohio 43021
Philip Pointer	Same as Post Office Address	USA	5624 boulder Crest Columbus, Ohio 43235
Kenneth Cook	Same as Post Office Address	USA	4484 Wrangell Place Gahanna, Ohio 43230

1. ☒ Enclosed is a copy of the latest inventor-signed prior application, including a copy of the oath or declaration ( 4 pages) showing the original signature or an indication it was signed. I hereby verify that the papers are a copy of the latest signed prior application Serial No. 09/250,675. The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied, is considered as being part of the disclosure of the present continuation application and is hereby incorporated by reference therein. All statements made herein of my own knowledge are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.
- 1a. ☐ Deletion of inventor(s) - Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
2. ☒ Please cancel claims 2-35.
3. ☒ A Preliminary Amendment is enclosed.
4. ☒ The filing fee is calculated on the basis of the claims existing in the prior application Serial No. 09/250,675 as amended at 2 and 3 above.

	No of Claims		Extra Claims	Rate	Fee
Total Claims	24	Minus 20	4	x \$18.00	\$72.00
Independent Claims	9	Minus 3	6	x \$78.00	\$468.00
Basic Application Fee					\$690.00
If multiple dependent claims are presented, add \$270.00					
Total Application Fee					\$1,230.00
Subtract <input type="checkbox"/> if small entity					
TOTAL APPLICATION FEE DUE					\$1,230.00

- 5a. ☐ Enclosed is a Verified Statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.
- 5b. ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27 was filed in prior application Serial No. \_\_\_\_\_, the status is still proper and desired.

6. [X] A check in the amount of \$1,230.00 is submitted herewith. The Commissioner is hereby authorized to charge any other fees under 37 CFR 1.16 and 1.17 which may be required, including any extension of time fees to maintain the pendency of the parent application Serial No. 09/250,675 or credit any overpayment to Deposit Account No. 12-0429.
7. [X] Amend the specification by inserting before the first line the sentence:  
--This application is a continuation of pending Application Serial Number 09/250,675, filed February 16, 1999, titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS" which is a continuation of Serial Number 08/372,620, filed January 13, 1995 (now U.S. Pat. No. 5,873,072) titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS, which is a continuation of Serial Number 07/736,071, filed July 25, 1991 (now U.S. Pat. No. 5,383,113), titled "SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS".
8. ☐ Priority of foreign Application Serial No. \_\_\_\_\_ filed on \_\_\_\_\_, in \_\_\_\_\_, is claimed under 35 USC 119. The certified priority document(s) were filed in Serial No. \_\_\_\_\_, filed on \_\_\_\_\_.
9. [X] The prior application is assigned of record to: CheckFree Corporation  
4411 East Jones Bridge Road  
Norcross, Georgia 30092
10. [X] The power of attorney in the prior application is to: Alfred A. Stadnicki, Reg. No. 30,226
11. [X] 28 pages of specification; 4 pages of Declaration; and 7 sheets of informal drawings are enclosed.
12. [X] Also enclosed: Information Disclosure Statement; with PTO 1449 and Appendix A  
  
Address all future communications to: Alfred A. Stadnicki  
1146 Nineteenth Street, NW  
Fifth Floor  
Washington, DC 20009
13. [X] Two return receipt postcards are submitted herewith.

It is understood that secrecy under 35 USC 122 is hereby waived to the extent that if information or access is available to any one of the applications in the file wrapper of a 37 CFR 1.53(b) application, be it either this application or a prior application in the same file wrapper, the Patent and Trademark Office may provide similar information or access to all the other applications in the same file wrapper.

Respectfully submitted

LALOS & KEEGAN



Alfred A. Stadnicki

Registration No. 30,226

1146 Nineteenth Street, N.W.  
Fifth Floor  
Washington, D.C. 20036-3703  
Telephone (202)887-5555  
Facsimile (202)296-1682  
Date: March 31, 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :  
Kight et al. : Expected Art Unit: 2764  
:  
Rule 53(b) Continuation of :  
Serial Number 09/250,675, :  
filed February 16, 1999 :  
:  
: Expected Examiner:  
: R. Weinhardt:  
:  
Filed: Concurrently Herewith :

For: SYSTEM AND METHOD FOR ELECTRONICALLY PROVIDING  
CUSTOMER SERVICES INCLUDING PAYMENT OF BILLS,  
FINANCIAL ANALYSIS AND LOANS

**PRELIMINARY AMENDMENT**

Honorable  
Assistant Commissioner  
for Patents  
Washington, DC 20231

Sir:

The preliminary amendment is directed to the  
accompanying 37 CFR 1.53(b) application, which is a  
Continuation of pending Application Serial Number

09/250,675, filed February 16, 1999. Prior to examination, please amend the above-identified application as follows:

**IN THE TITLE**

Please amend the title to read "BILL PAYMENT SYSTEM AND METHOD UTILIZING BANK ROUTING NUMBERS".

**IN THE CLAIMS**

Please cancel claim 1.

Please add claims 36-59 as follows:

--36. A method for processing consumer supplied banking information, comprising the steps of:

receiving from a consumer, via a network, a routing number associated with a financial institution at which the consumer maintains a deposit account; and

verifying that the consumer financial institution routing number received from the consumer is correct.

37. The method of claim 36, further including the steps of:

receiving a plurality of financial institution routing numbers from a plurality of financial institutions; and

storing the received plurality of financial institution routing numbers in a financial institutions file;

wherein verifying that the consumer financial institution routing number received from the consumer is correct includes comparing the consumer financial institution routing number received from the consumer to the financial institutions file.

38. The method of claim 37, further including the step of:  
rejecting the consumer financial institution routing number received from the consumer if the consumer financial institution routing number does not correspond to the financial institutions file.

39. The method of claim 36, further including the steps of:

entering the consumer financial institution routing number into a computer system; and

verifying that the consumer financial institution routing number is entered correctly.

40. The method of claim 36, further including the steps of:

receiving a request to pay a bill associated with a merchant on behalf of the consumer;

processing the received request to determine if the consumer financial institution can process electronic fund transfers; and

processing the received request to generate an instruction to pay the bill by electronic fund transfer from the consumer deposit account if the consumer financial institution can process electronic fund transfers.

41. The method of claim 40, further including the steps of:

receiving a plurality of financial institution routing numbers from a plurality of financial institutions; and

storing the received plurality of financial institution routing numbers in a financial institutions file;

wherein processing the received request to determine if the consumer financial institution can process electronic fund transfers includes comparing the consumer financial institution routing number received from the consumer to the financial institutions file.

42. A method for paying bills, comprising the steps of:

receiving, via a network, a request to pay a bill associated with a merchant on behalf of a consumer and a routing number associated with a financial institution at which the consumer maintains a deposit account;

comparing the consumer financial institution routing number routing number to a database of financial institution routing numbers to determine if the consumer financial institution can process electronic fund transfers; and

processing the received request to generate an instruction to pay the bill by electronic fund transfer from the consumer deposit account if the consumer financial institution can process electronic fund transfers.

43. A method for determining if a financial institution can process electronic fund transfers, comprising the steps of:

receiving from a plurality of financial institutions a plurality of financial institution routing numbers;

storing the plurality of financial institution routing numbers in a database containing financial institution information; and

comparing a financial institution routing number associated with a financial institution to the database of financial institution information to determine if the



financial institution can process electronic fund transfers.

44. A system for processing consumer supplied banking information, comprising:

a network interface configured to receive from a consumer a routing number associated with a financial institution at which the consumer maintains a deposit account; and

a processor configured to verify that the consumer financial institution routing number received from the consumer is correct.

45. The system of claim 44, further comprising:

a storage device configured to store a plurality of financial institution routing numbers received from a plurality of financial institutions;

wherein the processor is further configured to compare the consumer financial institution routing number received from the consumer to the plurality of financial institution routing numbers stored in the storage device to verify that the consumer financial institution routing number received from the consumer is correct.

46. The system of claim 45, wherein the processor is further configured to reject the consumer financial institution routing number received from the consumer if the consumer financial institution routing number does not correspond to one of the plurality of financial institution routing numbers stored in the storage device.

47. The system of claim 44, further comprising:

a data entry device for entering the consumer financial institution routing number received from the consumer;

wherein the processor is further configured to verify that the consumer financial institution routing number is entered correctly.

48. The system of claim 44, wherein:

the network interface is further configured to receive a request to pay a bill associated with a merchant on behalf of the consumer; and

the processor is further configured to process the received request to determine if the consumer financial institution can process electronic fund transfers and to generate an instruction to pay the bill by electronic fund transfer from the consumer deposit account if the consumer financial institution can process electronic fund transfers.

49. The system of claim 48, further comprising:

a storage device configured to store a plurality of financial institution routing numbers received from a plurality of financial institutions;

wherein the processor is further configured to compare the consumer financial institution routing number received from the consumer to the plurality of financial institution routing numbers stored in the storage device to determine if the consumer financial institution can process electronic funds transfers.

50. A system for paying bills, comprising:

a network interface configured to receive a request to pay a bill associated with a merchant on behalf of a consumer and a routing number associated with a financial institution at which the consumer maintains a deposit account;

a database of financial institution routing numbers;  
and

a processor configured to compare the consumer financial institution routing number to the database of financial institution routing numbers to determine if the consumer financial institution can process electronic fund transfers and to generate an instruction to pay the bill by electronic fund transfer from the consumer deposit account if the consumer financial institution can process electronic fund transfers.

51. A system for determining if a financial institution can process electronic fund transfers, comprising:

a storage device configured to store a plurality of financial institution routing numbers received from a plurality of financial institutions; and

a processor configured to compare a financial institution routing number associated with a financial institution to the plurality of financial institution routing numbers stored in the storage device to determine if the financial institution can process electronic fund transfers.

52. An article of manufacture for paying bills, comprising:

a computer readable medium; and  
computer programming stored on the medium;

wherein the stored computer programming is configured to be readable from the computer readable medium by a computer to thereby cause the computer to operate so as to:

receive from a consumer, via a network, a routing number associated with a financial institution at which the consumer maintains a deposit account; and

verify that the consumer financial institution routing number received from the consumer is correct.

53. The article of manufacture according to claim 52, wherein the computer readable medium is further readable to cause the computer to:

receive a plurality of financial institution routing numbers from a plurality of financial institutions;

store the plurality of financial institution routing numbers received from the plurality of financial institutions in a financial institutions file; and

compare the consumer financial institution routing number received from the consumer to the financial institutions file to verify that the consumer financial institution routing number received from the consumer is correct.

54. The article of manufacture according to claim 53, wherein the computer readable medium is further readable to cause the compute to:

reject the consumer financial institution routing number received from the consumer if the consumer financial institution routing number does not correspond to the financial institutions file.

55. The article of manufacture according to claim 52, where the computer readable medium is further readable to cause the computer to:

verify that the consumer financial institution routing number is entered correctly.

56. The article of manufacture according to claim 52, wherein the computer readable medium is further readable to cause the computer to:

receive a request to pay a bill associated with a merchant on behalf of the consumer;

process the received request to determine if the consumer financial institution can process electronic fund transfers; and

process the received request to generate an instruction to pay the bill by electronic fund transfer from the consumer deposit account if the consumer financial institution can process electronic fund transfers.

57. The article of manufacture according to claim 56, wherein the computer readable medium is further readable to cause the computer to:

store a plurality of financial institution routing numbers received from a plurality of financial institutions in a financial institutions file; and

compare the consumer financial institution routing number received from the consumer to the financial institutions file to determine if the consumer financial institution can process electronic fund transfers.

58. An article of manufacture for paying bills, comprising:

a computer readable medium; and  
computer programming stored on the medium;  
wherein the stored computer programming is configured  
to be readable from the computer readable medium by a  
computer to thereby cause the computer to operate so as to:  
receive, via a network, a request to pay a bill  
associated with a merchant on behalf of a consumer and a  
routing number associated with a financial institution at  
which the consumer maintains a deposit account;  
compare the consumer financial institution routing  
number to a database of financial institution routing  
numbers to determine if the consumer financial institution  
can process electronic fund transfers; and  
process the received request to generate an  
instruction to pay the bill by electronic fund transfer  
from the consumer deposit account if the consumer financial  
institution can process electronic fund transfers.

59. An article of manufacture for determining if a  
financial institution can process electronic fund  
transfers, comprising:

a computer readable medium; and  
computer programming stored on the medium;  
wherein the stored computer programming is configured  
to be readable from the computer readable medium by a  
computer to thereby cause the computer to operate so as to:  
receive from a plurality of financial institutions a  
plurality of financial institution routing numbers;  
store the plurality of financial institution routing  
numbers in a database containing financial institution  
information; and

compare a financial institution routing number associated with a financial institution to the database of financial institution information to determine if the financial institution can process electronic fund transfers.--

**IN THE ABSTRACT**

Please delete the abstract in its entirety and substitute therefor the abstract attached hereto on a separate sheet.

**REMARKS**

This preliminary amendment is directed to the accompanying 37 CFR 1.53(b) application, which is a Rule 53(b) continuation of pending Application Serial Number 09/250,675, filed February 16, 1999, which is a continuation of Serial Number 08/372,620, filed January 13, 1995 (now U.S. Pat. No. 5,873,072), which is a continuation of Serial Number 07/736,071, filed July 25, 1991 (now U.S. Pat. No. 5,383,113).

Claim 1 is pending in this application, claims 2-35 having been cancelled in the submittal of the Rule 53(b) continuation application. Claim 1 is cancelled by this preliminary amendment.

Claims 36-59 are added herein.

The title is amended to more fully describe the invention.

A new abstract has been submitted which better describes the invention to which the application relates.

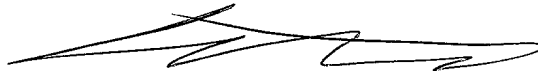
No new matter is added by this preliminary amendment.

New claims 36-59 are directed to an innovative bill payment technique disclosed in the written description of the application as originally filed.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed local telephone number, in order to expedite resolution of any remaining issues and further to expedite passage of the application to issue, if any further comments, questions or suggestions arise in connection with the application.

To the extend necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 12-0429 and please credit any excess fees to such deposit account.

Respectfully submitted,  
LALOS & KEEGAN



Alfred A. Stadnicki  
Registration No. 30,226

AAS/SWC  
1146 Nineteenth Street, N.W.  
Fifth Floor  
Washington, D.C. 20036-3703  
Telephone: 202-887-5555  
Facsimile: 202-296-1682  
Date: March 30, 2000



1                                   **SYSTEM AND METHOD**  
2                                   **FOR ELECTRONICALLY PROVIDING CUSTOMER SERVICES**  
3                                   **INCLUDING PAYMENT OF BILLS, FINANCIAL ANALYSIS AND LOANS**

4                   **RELATED APPLICATIONS**

5                   This is a continuation of co-pending Application for United States Letters Patent  
6                   Serial No. 08/372,620, filed January 13, 1995, which will issue as U.S. Patent No 5,873,072  
7                   on February 16, 1999, which was a continuation of co-pending application for United States  
8                   Letters Patent Serial No. 07/736,071, filed on July 25, 1991, which issued as United States  
9                   Patent No. 5,383,113 on January 17, 1995, each having the common assignee of the present  
10                  invention and each incorporated herein by reference for all purposes.

11                  **BACKGROUND AND SUMMARY OF THE INVENTION**

12                  The present invention relates generally to apparatus and methods for paying bills.  
13                  More particularly, the present invention is a computerized system for paying bills whereby  
14                  a consumer may contact a single source from a remote location via a telephone, a computer  
15                  terminal with modem, or other electronic means, to direct the single source to pay the  
16                  consumer's bills instead of the consumer writing checks for each bill. A microfiche appendix  
17                  has been submitted with the parent case of this Application Serial No. 07/736,071, which  
18                  issued as United States Letters Patent No. 5,383,113 on January 17, 1995, which contains

1 the program code of the present invention and which in its entirety is incorporated herein by  
2 reference. An additional hard copy of the appendix is attached as Exhibit A.

3 It has been common for many years for consumers to pay monthly bills by way of  
4 a personal check written by the consumer and sent by mail to the entity from which the bill  
5 or invoice was received. Consumers have used other ways to pay bills, including personally  
6 visiting the billing entity to make a cash payment. In today's economy, it is not unusual for  
7 a consumer to have several regular monthly invoices to pay. Writing individual checks to  
8 pay each invoice can be time-consuming and costly due to postage and other related  
9 expenses.

10 A need exists for a method whereby a consumer can contact a single source and  
11 inform the source to pay various bills of the consumer, to have the source adjust the  
12 consumer's account with the consumer's financial institution (i.e., bank, credit union, savings  
13 and loan association, etc.) to reflect a bill payment, and to actually pay the billing entity a  
14 specified amount by a particular time. The system should be efficient and not unreasonably  
15 expensive and relatively simple for a consumer to interact with. Some banks have attempted  
16 to provide a service for making payment to a few billing entities to which the banks have  
17 established relations. The banks that do provide that type of service are limited in that they  
18 provide the service only for their own customers since the banks have not developed a  
19 system for accurately acquiring and processing account numbers and balances of customers  
20 of all other banking institutions and coordinating that information with bill payment.

1 Furthermore, banks have not developed a system for managing the risks involved in  
2 providing such a service and the inherent complexities of providing the service to consumers  
3 other than the bank's own customers. Therefore, a need exists for a single source bill  
4 payment system that would be available to any consumer, regardless of where the consumer  
5 banks and regardless of what bills are to be paid.

6 The present invention is designed to fulfill the above listed needs. The invention  
7 provides a universal bill payment system that works regardless of the consumer's financial  
8 institution and bill to be paid. The present invention provides a computerized system by  
9 which a consumer may pay bills utilizing the telephone, a computer terminal, or other  
10 electronic, data transmission means. Transactions are recorded against the consumer's  
11 account wherever he or she banks. The consumer may be an individual or a business, large  
12 or small. The present invention works regardless of where the consumer banks.

13 The method of the present invention includes: gathering consumer information and  
14 creating a master file with banking information and routing codes; inputting payment  
15 instructions by the consumer at a convenient location (e.g., at home), typically remote from  
16 the payment service provider, by using an input terminal such as a push-button telephone;  
17 applying the payment instructions to the consumer's file; using computer software of the  
18 present invention to examine various files to determine such things as what is the appropriate  
19 form of payment based on variables involving banking institutions and merchants;  
20 comparing each transaction against a dynamic credit file and routing based on set parameters;

1 and, if the payment system determines that everything is ready for payment to be made,  
2 adjusting the consumer's account (usually by debiting) and making payment directly to the  
3 billing entity. The single source service provider for consumer bill payment could be any  
4 entity with the capability to practice the invention as described hereinafter. The foregoing  
5 and other objects and advantages will become more apparent when viewed in light of the  
6 accompanying drawings and following detailed description.

#### 7 BRIEF DESCRIPTION OF THE DRAWINGS

8 Figure 1 is a diagrammatical representation of the creation of a consumer database;

9 Figure 2 is a diagrammatical representation of the establishment of a merchant's  
10 (billing entities) database and the making of payments;

11 Figure 3 is a diagrammatical representation of the creation of a consumer pay table;

12 Figures 4a is a diagrammatical representation of a payment processing cycle;

13 Figure 4b is a continuation of the diagram of Figure 4a;

14 Figure 4c is a continuation of the diagram of Figure 4b;

15 Figure 5 is a diagrammatical representation of a computer hardware system that may  
16 be used for accomplishing the present invention; and

17 Figure 6 is a diagrammatical representation of another computer hardware system that  
18 may be used for accomplishing the present invention.

## DESCRIPTION OF PREFERRED EMBODIMENT(S)

Referring now to the drawings, Figure 1 illustrates the steps in the creation of a consumer database for use with the present invention. The first step in the process is to establish a consumer's data records on the system. This may be accomplished by the consumer completing an authorization form 20 which would contain the needed information to input into the system concerning the consumer. This information may include the consumer's name, address, telephone number and other applicable information. The consumer would also provide a voided check from the consumer's personal checking account. The consumer's information may then be manually input via a keyboard 52 into the consumer database record 22. Default amounts may be set for an individual credit line parameter and for a total month-to-date parameter. These amounts establish the maximum unqualified credit risk exposure the service provider is willing to accept for an individual transaction and for the collective month-to-date transactions of a consumer. As explained hereinafter, the service provider may be at risk when paying a consumer's bills by a check written on the service provider's account.

From the voided check, the consumer's bank routing transit and individual account numbers at an institution are input into the computer system. This information may be edited against an internal financial institutions file (FIF) database 24 of the present invention. FIF 24 is a database of financial institutions' identification codes and account information for the consumer. This file edits the accuracy of the routing transit number and the bank account

number. If the numbers do not correspond with the correct routing and bank numbers, they are rejected and the data entry is done again. FIF 24 in conjunction with the software of the present invention also updates the consumer database 22 for both electronic and paper draft routing and account information. The needed information may be obtained from each banking institution and each consumer.

The consumer is notified by the service provider of his or her local phone number access and personal security code for informing the service provider that a bill is to be paid. This information may be stored in a phone access table 26. The personal security code may be much like an ATM machine four digit code. In addition, to comply with federal law, an electronic pre-note 28 will be created to be sent to the consumer's bank to inform the bank that the service provider is authorized to debit the consumer's account. For further security to the service provider, a consumer credit record 30 may be obtained. The default credit limit amounts over which the service provider may be unwilling to assume financial risk may be modified based on the information obtained from the credit report 30.

In Figure 2 the steps are shown for establishing merchants to be paid and the making of a payment. The consumer must inform the service provider or processor of a merchant's name, address, phone number and the consumer's account number with the merchant 32. The term "merchant" as used herein is intended to pertain to any person or entity that the consumer wishes to pay and is not to be limited to the usual merchants most consumers pay, such as the electric company, a home mortgage lender, etc. This information is put into a

1 merchant master file database 42 (MMF). The consumer may also indicate whether the  
2 merchant is a variable or fixed merchant. A variable merchant is one in which the date and  
3 amount of payment will vary each month. A fixed merchant is one in which the date and  
4 amount remain the same each month. If the merchant is fixed, the frequency of payment  
5 may be other than monthly, such as weekly, quarterly, etc. The consumer should inform the  
6 service provider of the date on which the merchant is to be paid and the amount to be paid.

7 Through a telecommunications terminal 34 (e.g., a push-button telephone or  
8 computer terminal), a consumer may initiate payment of bills. Through the terminal, the  
9 consumer may access his merchant list and input the payment date and amount. The system  
10 may be provided with a payment date editor 36 to insure that the date is valid and logical  
11 (i.e., payment dates already in the past or possibly a year or more into the future would be  
12 questioned). As payments are initiated, a consumer "checkbook register" may be created and  
13 automatically updated to reflect this activity. The merchant list can be visible on the  
14 consumer's personal computer screen. On a personal computer a consumer may enter  
15 merchant payment amounts and payment dates on the computer screen and then transmit this  
16 information to the service provider.

17 By telephone, the list may be presented by programmed voice. The voice may be  
18 programmed to ask the consumer if a particular merchant (selected from the consumer's  
19 MMF, which may be updated from time to time) is to be paid and to tell the consumer to  
20 press 1 if yes, or press 2 if no. If yes, the voice may instruct the consumer to enter the

amount to be paid by pressing the numbers on a touch tone phone. The asterisk button could be used as a decimal point. After the amount is entered, the voice may ask the consumer to enter the date on which payment is to be made to the merchant. This may be accomplished by assigning each month a number, such as January being month 01. The consumer may then enter month, day and year for payment. The programmed voice may be accomplished with a VRU (voice response unit) available from AT&T or other vendors. It may communicate with a data processor to obtain consumer information. At the end of the consumer's session on the terminal a confirmation number may be sent to the consumer, providing a record of the transaction.

In Figure 3 the steps are shown for the creation of the consumer pay table 38 and making updates to it. The consumer's files may be received at the service provider on a front end processor 40 that interfaces with the telecommunications network. The consumer's records may be edited 44 for validity by comparing to the merchants' account scheme. Any new merchant records are added to the consumer's pay table. New merchants are compared to the MMF 42 and appropriately cross-referenced to the pay table to check if a merchant record already exists. If no merchant record exists, a merchant record will be created on the MMF 42.

Payment records may also be received on the service provider's processor. The payment may first go through a validation process against the pay table. The validation process checks for duplicate payments and if duplicates are found they are sent to a reject



1 file. The validation process also verifies that merchants are set up and may check for  
2 multiple payments to be paid to a particular merchant. Orders for payment go to the  
3 consumer pay table to determine when the payment should be released and how it will be  
4 released for payment.

5 The service provider may pay merchants by a draft or check (paper) or by electronic  
6 funds transfer. To create a draft that will pass through the banking system, it must be  
7 specially inked. This may be accomplished by a printer which puts a micr code on drafts,  
8 like standard personal checks. For example, as shown in Figure 5, the front end processor  
9 40 may be a DEC VAX which is connected to an IBM main frame 46 Model 4381.  
10 Consumers may call by telephone 35, a number that passes through the private bank  
11 exchange (PBX) 39 and contacts a voice response unit 41 in association with the front end  
12 processor 40. After the consumer's payment instructions are received an analysis is  
13 performed to determine the most cost effective and least risk mode of payment for the service  
14 provider to use. One preferred mode of payment is electronic funds transfer through the  
15 Federal Reserve Automated Clearing House (ACH) Network 47. If the service provider is  
16 not a bank, a bank intermediary may be needed to be connected to the Federal Reserve  
17 Network. Another payment mode is a charge to the consumer's credit card through the RPS  
18 Network 49. Additionally, an IBM Laser Printer attached to a micr post printer 48 may be  
19 used by the service provider to send drafts 76 or consolidated checks 78 to merchants. The  
20 main frame 46 has data storage means 50 and runs the FIF 24 and MMF 42 programs. It

1 may also have a tape drive or telecommunication interface for accomplishing electronic  
2 funds transfer. It should be recognized that various other hardware arrangements could be  
3 used to accomplish the present invention. Figure 6 illustrates a similar arrangement for use  
4 when the consumer is using a personal computer 37 to instruct the service provider. The  
5 personal computer may access the front end processor 40 through the standard X.25 Network  
6 43.

7 Referring now to Figures 4a, 4b and 4c, the payment process is shown. The payment  
8 process may be cycled 56 each day or more or less frequently. The first step is to establish  
9 when payment items are to be processed. This may be accomplished through a processing  
10 calendar 58. A processing calendar 58 may be built into the system. The calendar 58  
11 enables the system to consider each date, including weekends and the Federal Reserve  
12 holidays. Payments are released from the consumer pay table 38 using the due date. Any  
13 bank date, payments, or payments within a period such as four business days may be released  
14 the same day. All future payment dates would be stored in the consumer pay table 38.  
15 On-line inquiry may be made on the consumer pay table 38. The service provider has on-line  
16 capability to make changes to the consumer payment upon request until the day the payment  
17 is released. A consumer's merchant change may also affect the consumer's payment on the  
18 pay table 38.

19 The method of payment to the merchant may be either paper (draft or check) or  
20 electronic. There are several factors in the process used to determine if a payment will be

released as a paper item, or an ACH electronic transaction (automated clearing house; service provider is a party to transaction). Each consumer may be assigned a status such as: active = good; inactive = bad; and, pending = uncertain, risky. If a consumer's status is pending 60, when reviewing the payment file with the processing calendar 58, the payment should go out as a draft paper to protect the service provider. When payment is made by draft, the service provider is not a contractual party to the transaction. The consumer's bank account codes are actually encoded onto the draft prepared by the service provider and act much like the consumer's personal check. The draft has been specially designed for this process. The draft is payable to either the service provider or the particular merchant. This allows the draft to be delivered to the merchant for payment and depositing, but allows the draft to be legally payable by the bank, with proper authorization. Additionally, posting information for the merchant is contained on the body of the draft. To the applicant's knowledge, it is the first time a draft has been used in such a manner and with this unique design to accomplish this. If the consumer's bank transit number does not indicate an electronic bank 62 (i.e., a banking institution that will accept electronic funds transfer), the program associated with FIF 24 sends the payment as a draft. A pre-note 28 is required any time 64 new banking information is entered on a consumer and the bank shows on FIF 24 as an electronic receiving bank. The pre-note period is ten (10) days under federal law. Any payments released during this period are sent as paper.

The third manner in which the service provider may pay bills is by a check written on the service provider's account. A consolidated check may be written if many customers have asked the service provider to pay the same merchant. Under this method of payment the service provider assumes some risk since the service provider writes the check on its own account. The service provider is later reimbursed by the (consumer's) banking institution.

As a means of minimizing risk to the service provider, any transaction may be compared to the MMF 42 credit limit. For example, if the check limit is greater than zero and the payment is \$50.00 or less 66, the item may be released as electronic 74 or by service provider check 78. If the payment is greater than \$50.00 but less than or equal to the merchant credit limit 68, the payment may be released as electronic payment 74 or check 78. Any payments within the merchant's credit limit 70 are added to the consumer's monthly ACH balance 72. This provides a monthly total billing day to billing day summary of the consumer's electronic payment activity. Any transaction may be compared to the consumer's database credit limit parameters. If a payment amount is greater than the consumer's credit limit, the item is released as a draft 76 which is written on the consumer's account. If the payment amount plus the total of electronic payments in a particular month is greater than the consumer's credit limit, the item is released as a draft 76. Items not released as paper are initiated as an ACH debit against the consumer's account.

The consumer database may be reviewed for proper electronic funds transfer (EFT) routing. Payment to the merchant may be accomplished one of three ways, depending on the

1 merchant's settlement code. Various merchant's settlement codes may be established. For  
2 example, a merchant set up with a settlement code "01" results in a check and remittance list  
3 78 being mailed to the merchant. Merchants with a settlement code, such as "10" produce  
4 an ACH customer initiated entry (CIE). Merchants with a settlement code, such as, "13"  
5 produce a remittance processing system (RPS) credit.

6 In the consumer pay table, for fixed payments, a payment date gets rolled to the next  
7 scheduled payment date on the pay table. The number of remaining payments counter is  
8 decreased by one for each fixed payment made. For variable payments once made, the  
9 payment date is deleted on the consumer pay table. The schedule date and amount on the  
10 consumer pay table roll to zero. A consumer payment history may also be provided which  
11 show items such as process date as well as collection date, settlement method, and check  
12 number in addition to merchant name and amount.

13 The software of the present invention is designed in part to make several decisions  
14 relating to particular transactions for consumers. The following example is provided to more  
15 fully describe the software. This example is not intended to limit the application to the  
16 details described in the example and is only provided to further enhance the description of  
17 the invention already stated above.

18 For this example, assume that a consumer has five transactions of varying amounts  
19 for which the consumer has asked the service provider to arrange payment. For simplicity,  
20 assume that the five payments are to be made on the same day. First, the consumer database

22 is edited to validate the status, banking institution, and pre-note flags associated with the consumer's requested payments. The account numbers provided by the consumer for the merchants to be paid, are also checked to determine if they are valid. Assuming the merchant account numbers are valid, the program begins with the first dollar analysis.

For purposes of this example, the five payments the consumer has requested are in the amounts of: \$25.00; \$75.00; \$150.00; \$250.00; and \$1,000.00. The program will consider each dollar amount individually as it goes through the various edit modes. The first edit may be called a \$50.01 edit. In this example, any transaction that is less than \$50.01 is automatically sent as an ACH debit to the consumer's account. This means that the service provider uses ACH to electronically transfer funds from the consumer's account to the service provider's clearing account.

In this example, the initial payment of \$25.00 will satisfy the \$50.01 edit and therefore will be paid without any further edits being conducted for this particular payment. Continuing with the example, the next edit may be a merchant dollar edit that is established for the specific merchant to which the transaction is being sent. For purposes of this example, this edit is set at \$100.00 for all merchants. Different dollar edits can be incorporated for different merchants. In the example, the second payment request of the consumer, for \$75.00, meets the \$100.00 merchant edit parameter and is sent as an ACH debit to the consumer's account. Note that the \$75.00 payment would not have satisfied the

1 \$50.01 edit and therefore would have passed on to the second edit which in this case, is the  
2 merchant dollar edit.

3 The remaining three payments in the example exceed both the \$50.01 edit and the  
4 merchant \$100.00 edit and therefore, go to the next edit. In the example, the next edit is for  
5 a consumer individual transaction limit set at \$200.00. The \$150.00 payment is less than the  
6 \$200.00 consumer individual transaction limit and is, therefore, sent as an ACH debit to the  
7 consumer's account and paid. The other two remaining payments yet to be made exceed the  
8 \$200.00 limit in this example and pass to the next edit.

9 In the next edit, which happens to be the last edit in the example, the consumer's  
10 month-to-date "unqualified" risk limit is checked. In the example, the month-to-date limit  
11 is set at \$1,500. Assume that for this particular consumer \$400.00 of month-to-date  
12 payments have already been made on the consumer's behalf. Added to the \$400.00 would  
13 be the three payments made above for \$25.00, \$75.00 and \$150.00. So an additional \$250.00  
14 is added to the \$400.00 month-to-date for a total of \$650.00 "unqualified" risk for the current  
15 month-to-date amount. The next payment to be made is for \$250.00 and would fall within  
16 the \$1,500 month-to-date limit when added to the current \$650.00 risk amount. Therefore,  
17 the \$250.00 payment is made and an ACH debit is sent to the consumer's account. This  
18 brings the total month-to-date "unqualified" risk amount to \$900.00. The final \$1,000  
19 payment has not been paid and would send the "unqualified" risk amount over \$1,500 when  
20 added to the \$900.00. Since the final payment of \$1,000 in the example fails the consumer

1 month-to-date limit edit, the \$1,000 payment would be sent as a paper draft directly drawn  
2 on the consumer's account, and for which the service provider has no liability. In the  
3 example, the final step would be updating the consumer month-to-date current total to  
4 \$900.00.

5 The apparatus for and method of bill payment of the present invention and many of  
6 its attendant advantages will be understood from the foregoing description. It will be  
7 apparent that various changes may be made in the form and steps thereof without departing  
8 from the spirit and scope of the invention or sacrificing all of its advantages.



**WE CLAIM:**

1           1.     A method of paying bills using a computer, comprising the steps of:  
2                 receiving a request to pay a bill of a particular merchant on behalf of a  
3 particular consumer;  
4                 selecting a payment type from a group consisting of a first payment type and  
5 a second payment type; and,  
                directing payment of the bill using the selected payment type.

1           2.     The method of claim 1 wherein the first payment type is an electronic  
2 funds transfer and the second payment type is selected from a group consisting of a draft and  
3 a check.

1           3.     The method of claim 2 wherein the step of selecting a payment type  
2 further includes the step of searching a database of merchant information, the database  
3 including an indicator of payment type corresponding to each of a plurality of merchants  
4 including the particular merchant.

1           4.     The method of claim 3 wherein the indicator of payment type includes  
2 a merchant's bank routing number.

1           5.     The method of claim 2 wherein the step of selecting a payment type  
2 includes the step of evaluating the amount of the bill to be paid.

1           6.     The method of claim 2 wherein the step of selecting a payment type  
2 includes the step of searching a database having deposit account numbers, each representing  
3 a respective deposit account maintained at one of a plurality of associated financial  
4 institutions by a plurality of consumers including the particular consumer, to identify the  
5 deposit account number of the particular consumer, and the step of directing payment of the  
6 bill includes the step of preparing a draft written on funds in the deposit account represented  
7 by the identified deposit account number.

1           7.     The method of claim 2 wherein the step of selecting a payment type  
2 includes the step of searching a database having deposit account numbers, each representing  
3 a respective deposit account maintained at one of a plurality of associated financial  
4 institutions by a plurality of consumers including the particular consumer, to identify the  
5 deposit account number of the deposit account of the particular consumer, and the step of  
6 directing payment of the bill includes the step of initiating an electronic funds transfer of  
7 funds in the deposit account represented by the identified deposit account number.

1                   8.       The method of claim 7 wherein the step of selecting a payment type  
2 further includes the step of searching a database of merchant information, the database  
3 including a bank routing number corresponding to each of a plurality of merchants including  
4 the particular merchant.

1                   9.       The method of claim 1 wherein the step of directing payment of the  
2 bill comprises the steps of:

3                   searching a database having deposit account numbers, each representing a respective  
4 deposit account maintained at one of a plurality of associated financial institutions by a  
5 plurality of consumers including the particular consumer, to identify the deposit account  
6 number of the deposit account of the particular consumer; and

7                   paying the bill from funds in a deposit account other than the deposit account  
8 represented by the identified deposit account number.

1                   10.     The method of claim 9 further comprising the step of:  
2                   transferring funds in the amount of the bill from the deposit account of the  
3 particular consumer to the deposit account from which the bill payment was made.

11. The method of claim 2 wherein the step of directing payment of the bill includes the step of preparing a check written on funds in a service provider's deposit account.

12. The method of claim 2 wherein the step of directing payment of the bill includes the step of initiating an electronic funds transfer from funds in a service provider's account.

13. The method of claim 1 further comprising the steps of:  
determining if the request to pay the bill is a duplicate of a previous request;  
and,  
terminating the request if the request is a duplicate request.

14. A method of paying bills using a computer, comprising the steps of:  
receiving an instruction to pay a bill of a particular merchant on behalf of a particular consumer;  
searching a database having deposit account numbers, each representing a respective deposit account maintained at one of a plurality of associated financial institutions by a plurality of consumers including the particular consumer, to identify the deposit account number of the deposit account of the particular consumer;

8                   selecting a payment type; and,  
9                   directing payment of the bill by the type of payment selected from funds in  
10                  the identified deposit account.

1                   15.     The method of claim 14 wherein the step of selecting a payment type  
2                   includes the step of comparing the amount of the bill to be paid to a predetermined amount.

1                   16.     The method of claim 14 wherein the step of selecting a payment type  
2                   includes the step of identifying a payment type indicator associated with the particular  
3                   merchant.

1                   17.     The method of claim 16 wherein the step of identifying a payment  
2                   type indicator associated with the particular merchant includes the step of searching a  
3                   merchant database having a payment type indicator associated with each of a plurality of  
4                   merchants including the particular merchant.

1                   18.     The method of claim 14 further comprising the steps of:  
2                   receiving a deposit account number representing a deposit account maintained  
3                   at one of a plurality of associated financial institutions by a particular consumer;  
4                   storing the deposit account number in a database of deposit account numbers;

5 comparing a particular consumer's deposit account number in the deposit  
6 account number database with the particular consumer's deposit account number in a  
7 financial institutions database to determine if the consumer's deposit account number in the  
8 deposit account number database is correct; and,

9 correcting the deposit account number if the deposit account number in the  
10 deposit account number database is not correct.

1 19. The method of claim 14 wherein the step of selecting a payment type  
2 further comprises the step of selecting a payment type from a check written on funds in a  
3 deposit account other than the deposit account represented by the identified deposit account  
4 number, a draft written on funds in the deposit account represented by the identified deposit  
5 account number, and an electronic funds transfer of funds in the deposit account represented  
6 by the identified deposit account number;

1 20. A method of electronically paying bills, comprising the steps of:  
2 receiving a request to pay a bill of a particular merchant on behalf of a  
3 particular consumer;

4 selecting a payment type from the group consisting of a draft, a check, and  
5 an electronic funds transfer; and,

6 directing payment of the bill using the selected payment type.

1           21.    The method of claim 20 wherein the step of selecting a payment type  
2 further includes the step of searching a database of merchant information, the database  
3 including an indicator of payment type corresponding to each of a plurality of merchants  
4 including the particular merchant.

1           22.    The method of claim 21 wherein the indicator of payment type  
2 includes a merchant's bank routing number.

1           23     The method of claim 20 wherein the step of selecting a payment type  
2 includes the step of evaluating the amount of the bill to be paid.

1           24.    The method of claim 20 wherein the step of selecting a payment type  
2 includes the step of searching a database having deposit account numbers, each representing  
3 a respective deposit account maintained at one of a plurality of associated financial  
4 institutions by a plurality of consumers including the particular consumer, to identify the  
5 deposit account number of the particular consumer, and the step of directing payment of the  
6 bill includes the step of preparing a draft written on funds in the deposit account represented  
7 by the identified deposit account number.

1           25.     The method of claim 20 wherein the step of selecting a payment type  
2 includes the step of searching a database having deposit account numbers, each representing  
3 a respective deposit account maintained at one of a plurality of associated financial  
4 institutions by a plurality of consumers including the particular consumer, to identify the  
5 deposit account number of the deposit account of the particular consumer and the step of  
6 paying the bill includes the step of initiating an electronic funds transfer of funds from the  
7 deposit account represented by the identified deposit account number.

1           26.     The method of claim 25 wherein the step of selecting a payment type  
2 further includes the step of searching a database of merchant information, the database  
3 including bank routing numbers corresponding to each of a plurality of merchants including  
4 the particular merchant.

1           27.     The method of claim 26 wherein the step of directing payment of the  
2 bill comprises the steps of:

3                 searching a database having deposit account numbers, each representing a  
4 respective deposit account maintained at one of a plurality of associated financial institutions  
5 by a plurality of consumers including the particular consumer, to identify the deposit account  
6 number of the deposit account of the particular consumer; and



7            paying the bill from funds in a deposit account other than the deposit account  
8 represented by the identified deposit account number.

1            28.    The method of claim 27 further comprising the step of:  
2            transferring funds in the amount of the bill from the deposit account of the  
3 particular consumer to the deposit account from which the bill payment was made.

1            29.    An article of manufacture, comprising:  
2            a computer readable medium; and  
3            computer software stored on the computer readable medium, the computer  
4 software comprising a set of instructions directing a computer to perform the steps of:  
5            receiving a request to pay a bill of a particular merchant on behalf of  
6 a particular consumer;  
7            selecting a payment type; and,  
8            directing payment of the bill using the selected payment type.

1            30.    An article of manufacture, comprising:  
2            a computer readable medium; and  
3            computer software stored on the computer readable medium, the computer  
4 software comprising a set of instructions directing a computer to perform the steps of:

5 receiving an instruction to pay a bill of a particular merchant on behalf  
6 of a particular consumer;

7 searching a database having deposit account numbers, each  
8 representing a respective deposit account maintained at one of a plurality of associated  
9 financial institutions by a plurality of consumers including the particular consumer, to  
10 identify the deposit account number of the deposit account of the particular consumer;

11 selecting a payment type; and,

12 directing payment of the bill by the type of payment selected from  
13 funds in the identified deposit account.

1 31. A system for paying bills using a computer, comprising:

2 means for receiving a request to pay a bill of a particular merchant on behalf  
3 of a particular consumer;

4 means for selecting a payment type; and,

5 means for directing payment of the bill using the selected payment type.

1 32. The system of claim 31 wherein said means for selecting a payment  
2 type comprises means for selecting a payment type from the group consisting of a draft, a  
3 check, and an electronic funds transfer.

1 33. A system for paying bills using a computer, comprising:  
2 a communications apparatus for receiving a request to pay a bill of a particular  
3 merchant on behalf of a particular consumer; and,  
4 a computer processor operatively connected to the communications apparatus  
5 for selecting a payment type and directing payment of the bill using the selected payment  
6 type.

1 34. A system for paying bills using a computer, comprising:  
2 a communications switch operatively connected to a network for receiving  
3 a request to pay a bill of a particular merchant on behalf of a particular consumer;  
4 a computer processor operatively connected to the network for selecting a  
5 payment type and directing payment of the bill using the selected payment type.

1 35. The system of claim 34 wherein the payment type is an electronic  
2 funds transfer and the computer processor is operatively connected to a second network in  
3 communication with an automated clearing house for initiating payment of the bill by the  
4 electronic funds transfer.

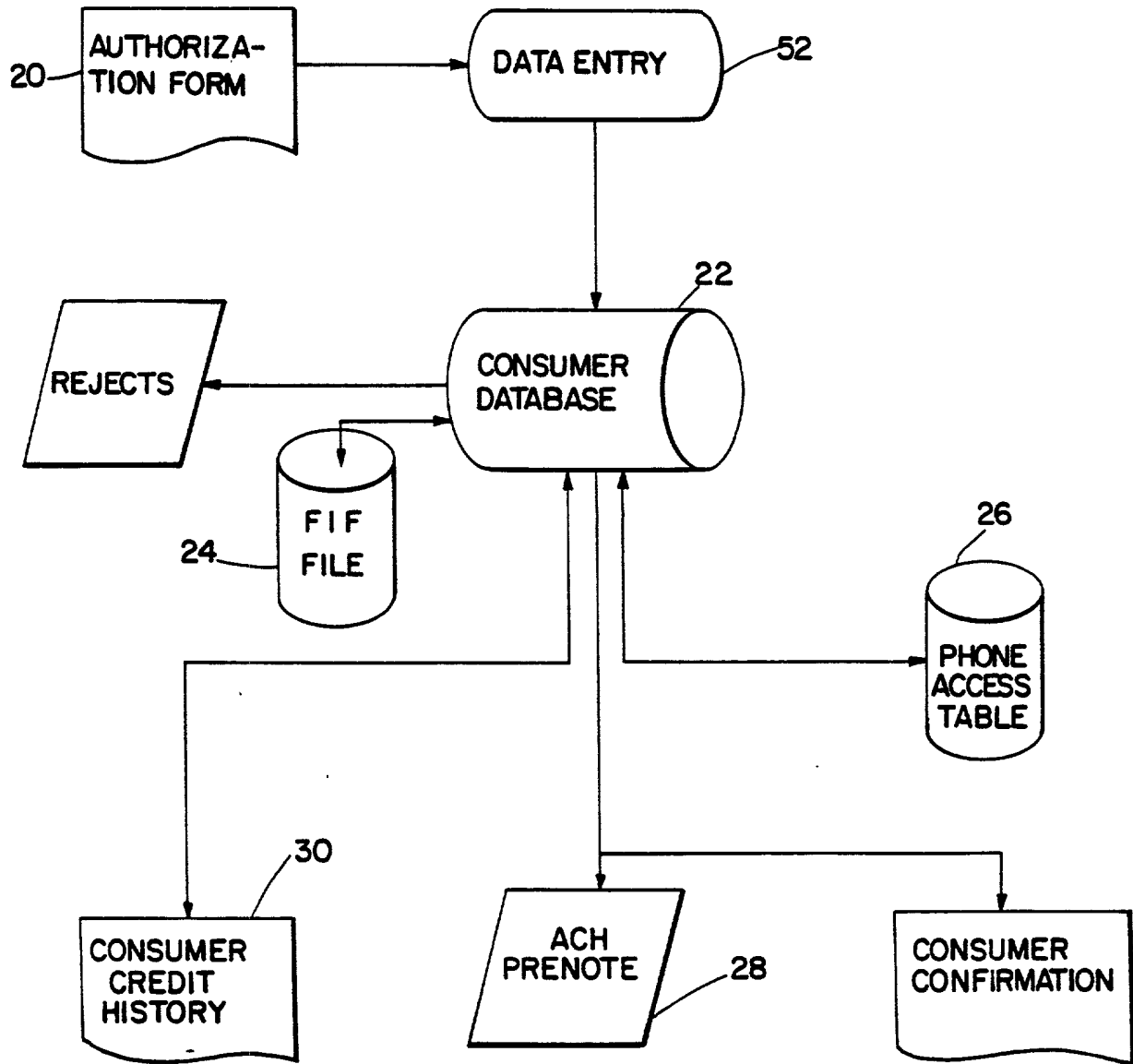
COLUMBUS/0510170.01

### ABSTRACT

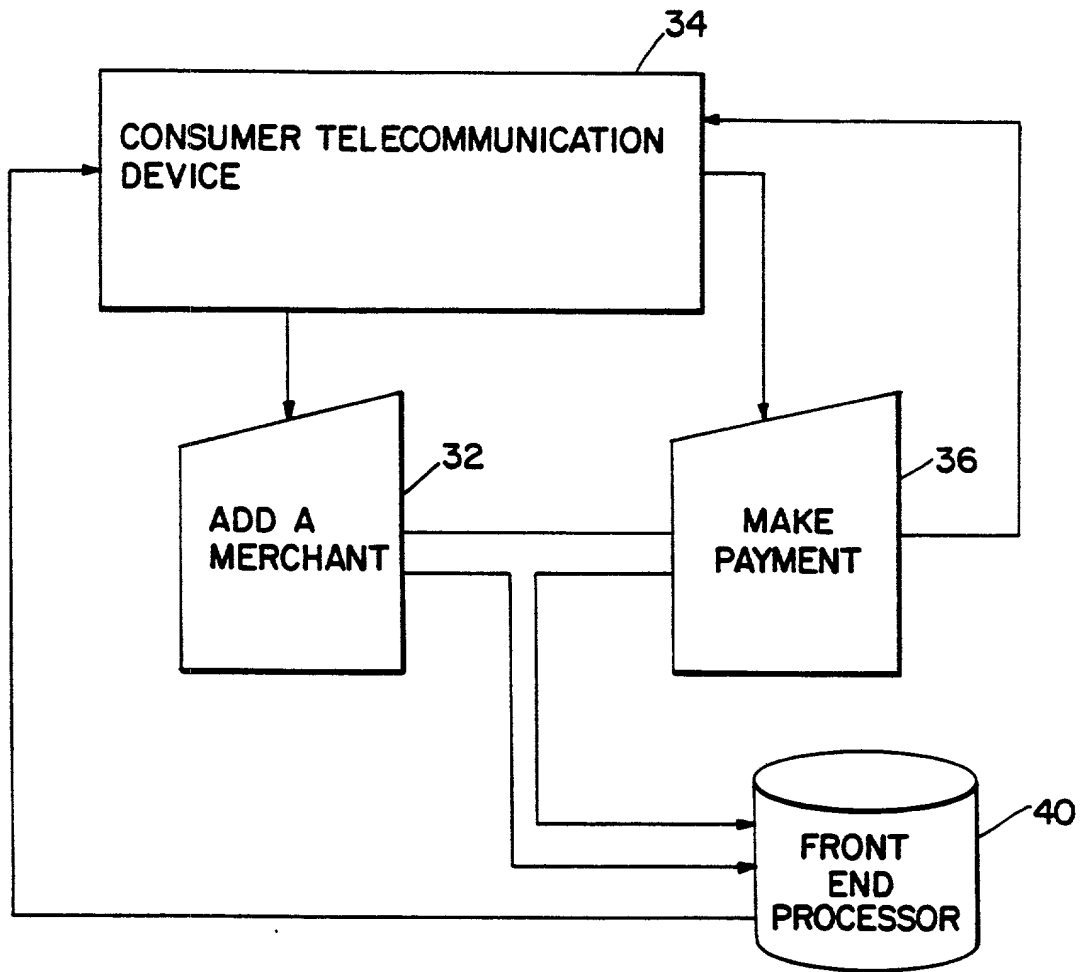
A computerized payment system by which a consumer may instruct a service provider by telephone, computer terminal, or other telecommunications means to pay various bills without the consumer having to write a check for each bill. The system operates without restriction as to where the consumer banks and what bills are to be paid. The service provider collects consumers' information, financial institutions' information and merchant information and arranges payment based on a financial risk analysis to the merchants according to the consumers' instructions.

## ABSTRACT

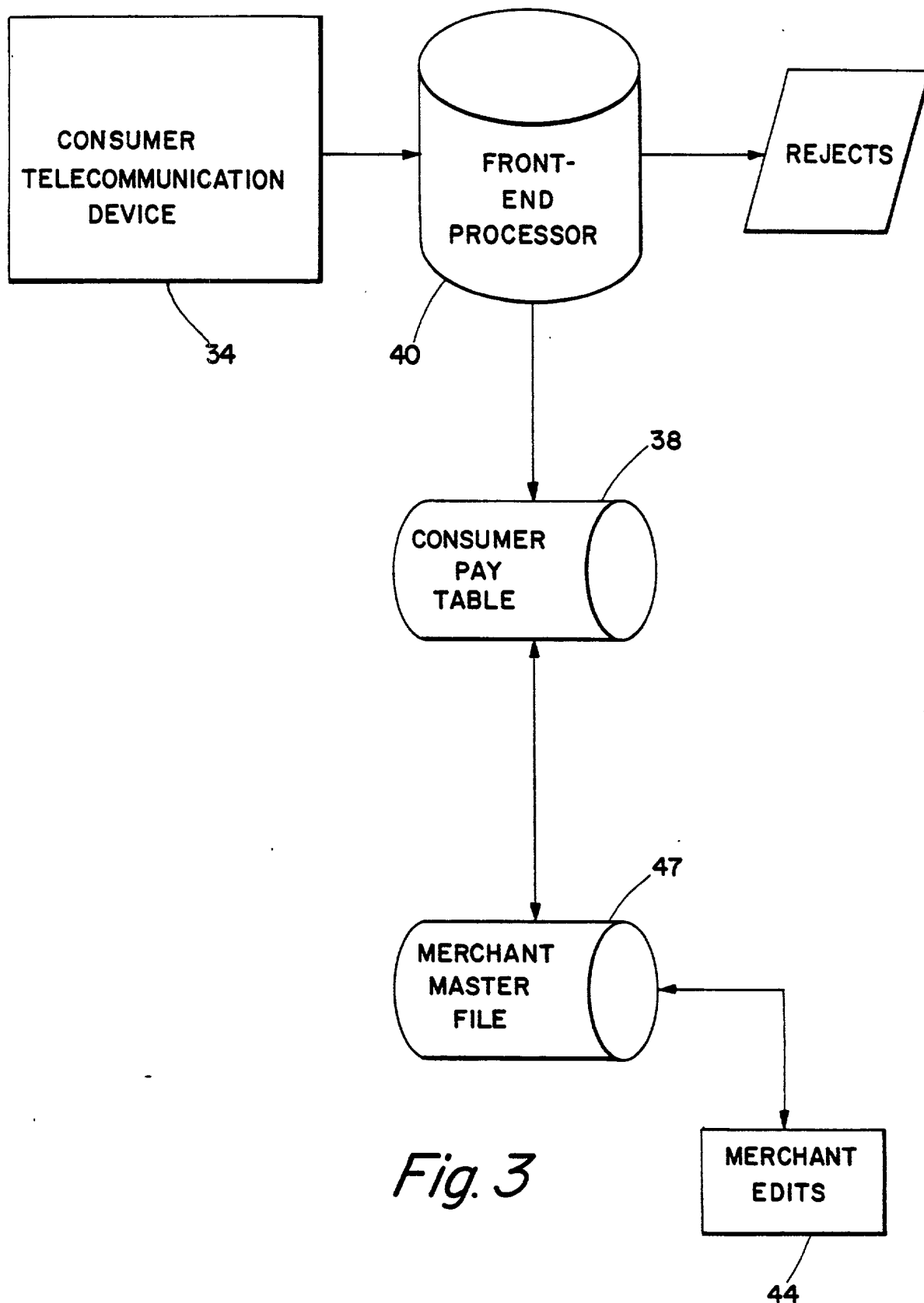
A system and method for paying bills which uses bank routing numbers. A service provider receives a bank routing number from a consumer, the routing number belonging to the bank at which the consumer maintains a deposit account. The service provider verifies that this received routing number is correct. The verification includes comparing the received routing number to a database of routing numbers which the service provider has obtained from banks.



*Fig. 1*



*Fig. 2*



*Fig. 3*



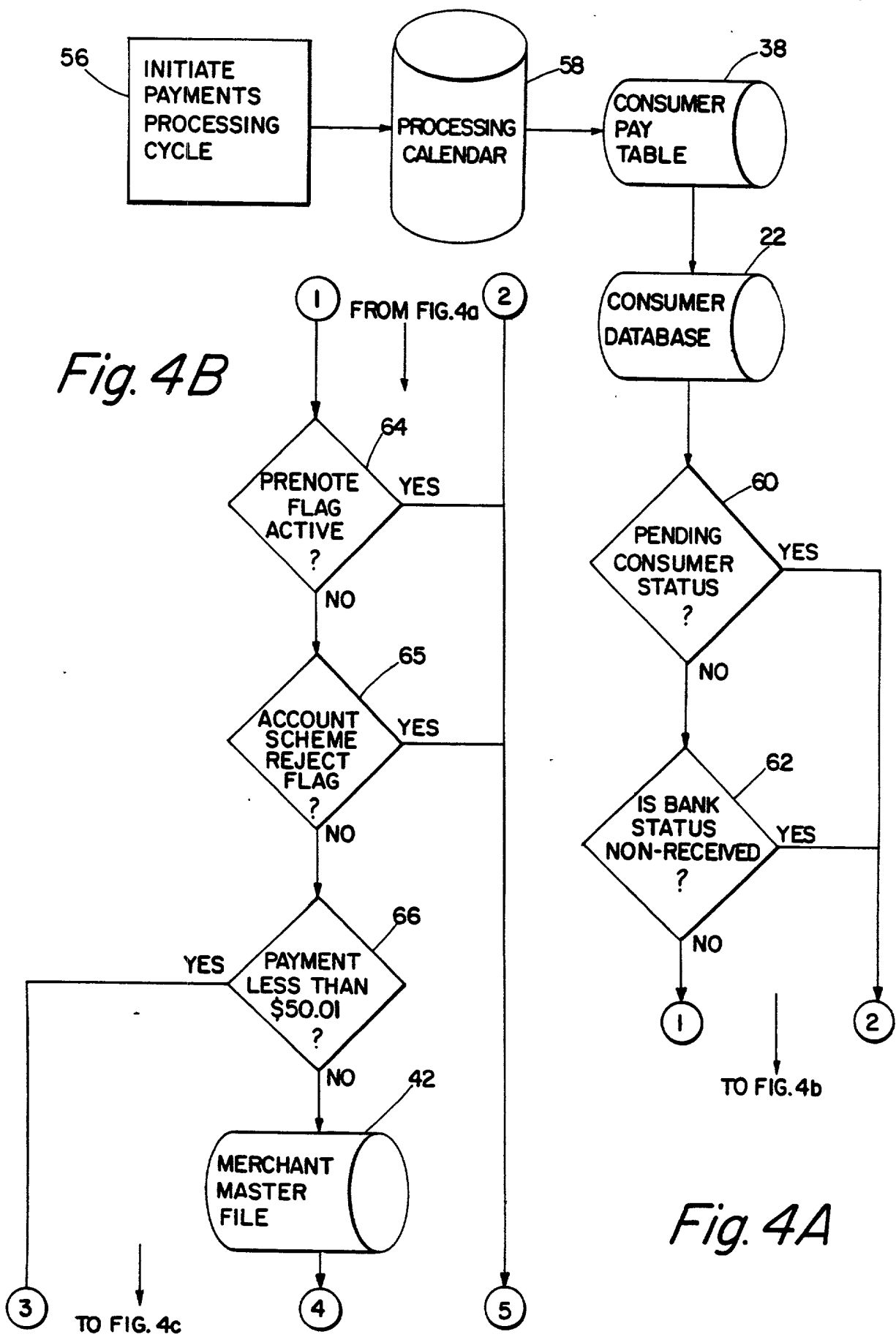
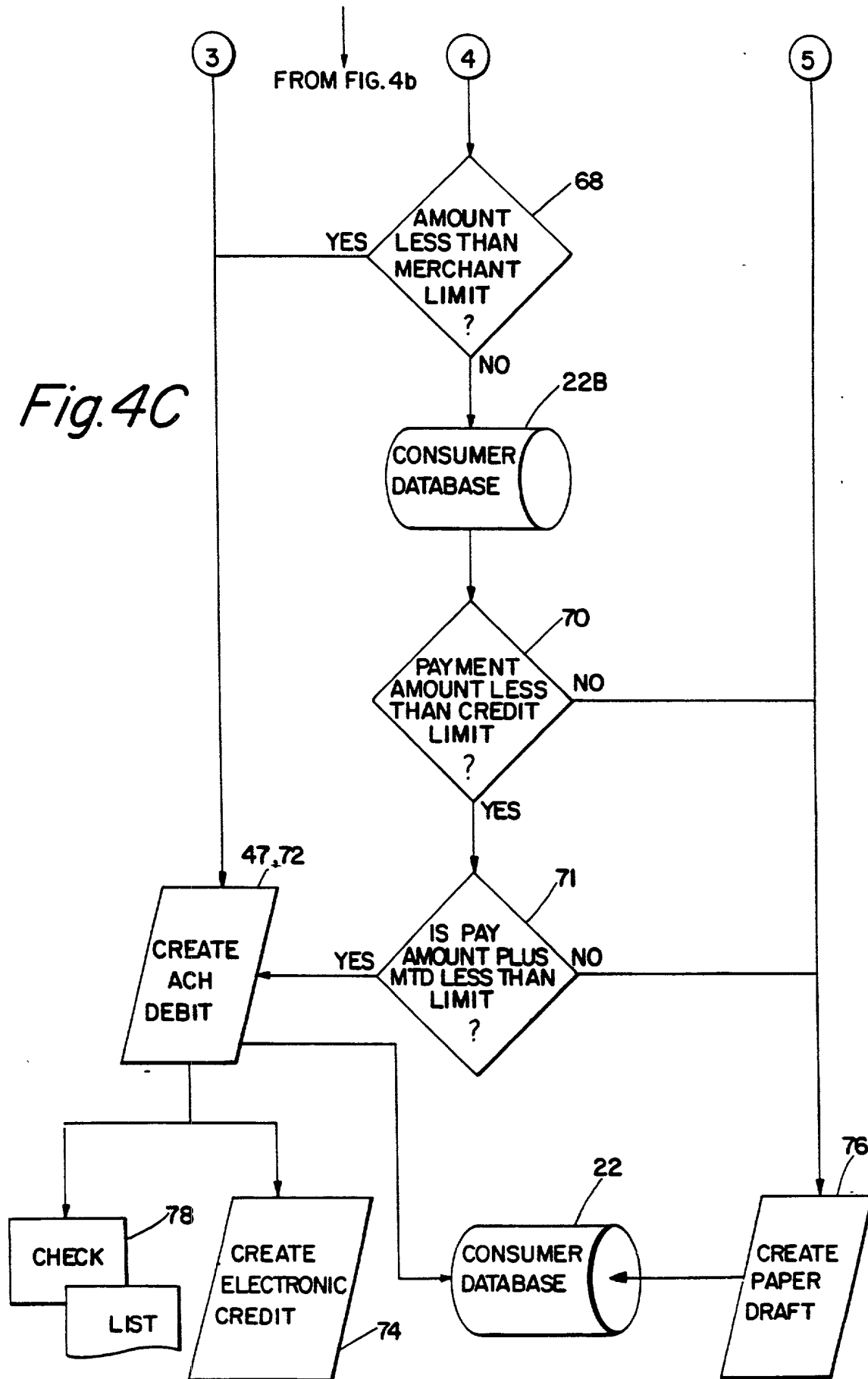


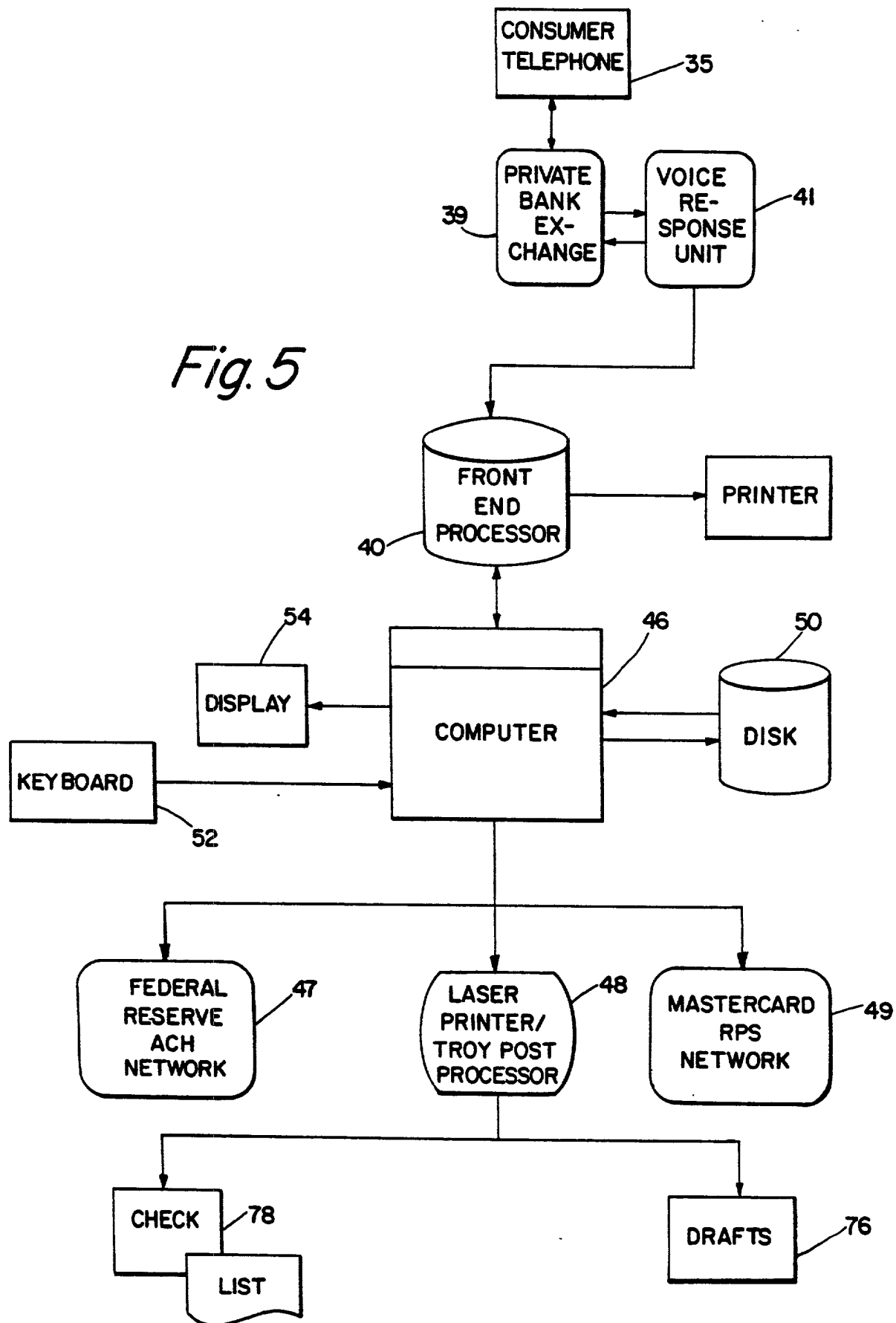
Fig. 4B

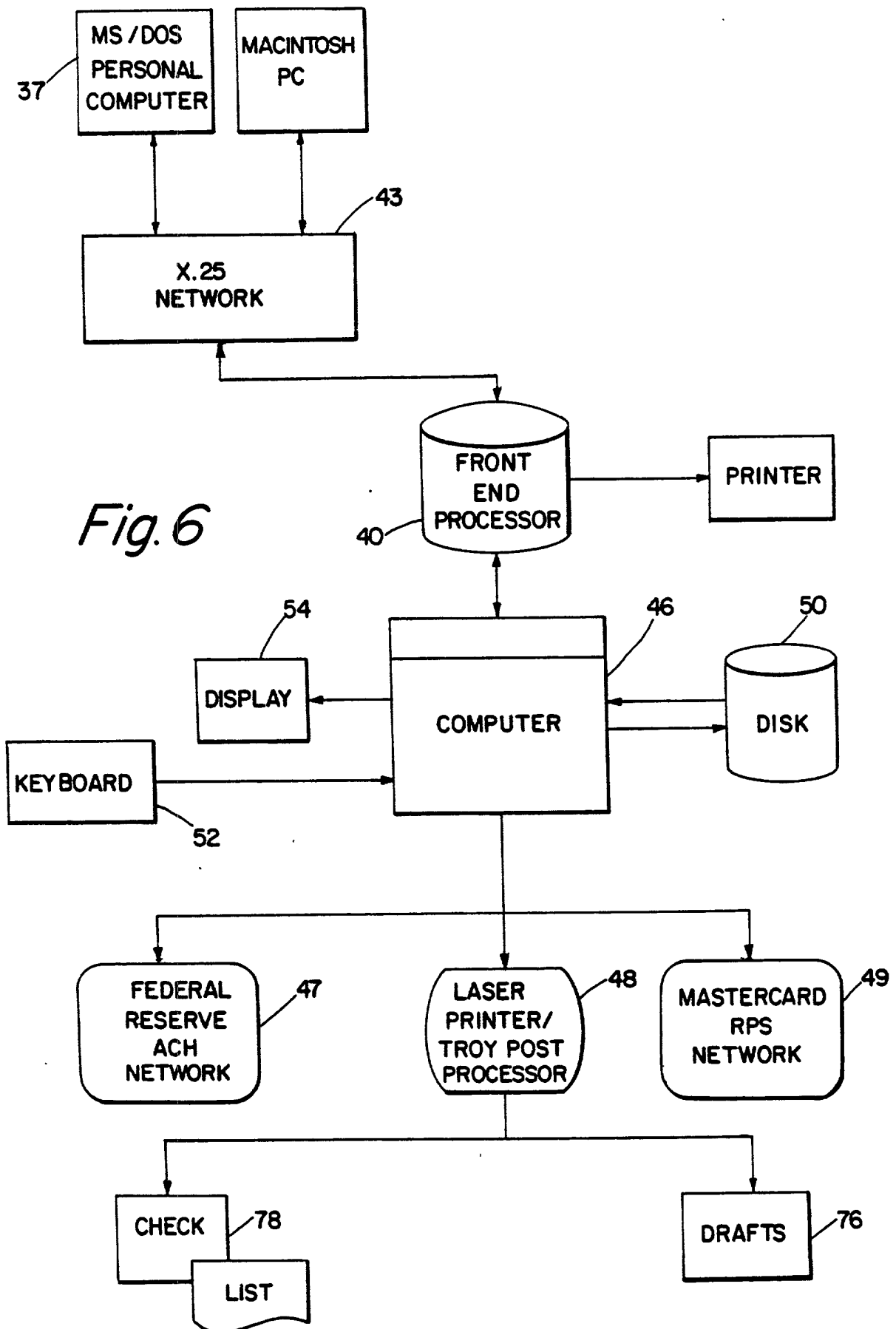
Fig. 4A

Fig. 4C



*Fig. 5*





*Fig. 6*

DECLARATION FOR PATENT APPLICATION

Docket No. 1761100-75803

As the below named inventors, we hereby declare that:

Our residence, post office addresses and citizenships are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled APPARATUS FOR AND METHOD OF BILL PAYMENT the specification of which is filed herewith.

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign applications for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Applications: None

We hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

None

(Application Serial No.) (Filing Date) (Status-patented, pending, abandoned)

We hereby appoint the following attorney and/or agent to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Jeffrey S. Standley (Reg. No. 34,021)  
Eric S. Lucas (Reg. No. 34,215)

Address all telephone calls to: Jeffrey S. Standley  
(614) 227-2030

Address all correspondence to: Porter, Wright, Morris & Arthur  
Attn: Patricia E. Lanier, C.L.A.  
41 South High Street  
Columbus, Ohio 43215

We hereby declare that all statements made herein of our knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of inventor: Peter J. Kight

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Mark A. Johnson

Inventor's signature Mark A. Johnson Date 7/25/91

Residence: 6251 D.C. St. N.W.  
Durham N.C. 27707 Citizenship: U.S.A.

Full name of inventor: Tamara K. Christenson

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Regina Lach

Inventor's signature Regina Lach Date 7/25/91

Residence: 7540 Cheshire Rd  
Delmar Oh 43021 Citizenship: U.S.A.

Full name of inventor: Philip Pointer

Inventor's signature Philip L Pointer Date 7/25/91

Residence: 5624 Boulder Crest  
Columbia Oh 43235 Citizenship: U.S.A.

Full name of inventor: Kenneth Cook

Inventor's signature Kenneth W Cook Date 7/25/91

Residence: 4484 Wrennell Pl.  
Delmar Oh 43030 Citizenship: U.S.A.

DECLARATION FOR PATENT APPLICATION

Docket No. 1761100-75803

As the below named inventors, we hereby declare that:

Our residence, post office addresses and citizenships are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled APPARATUS FOR AND METHOD OF BILL PAYMENT, the specification of which was filed on July 25, 1991 in patent application Serial No. 07/736,071.

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

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Prior Foreign Applications: None

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<u>None</u>		
(Application Serial No.)	(Filing Date)	(Status-patented, pending, abandoned)

We hereby appoint the following attorney and/or agent to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Jeffrey S. Standley (Reg. No. 34,021)  
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Columbus, Ohio 43215

We hereby declare that all statements made herein of our knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of inventor: Peter J. Kight

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Mark A. Johnson

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Tamara K. Christenson

Inventor's signature Tamara K. Christenson Date 8/27/91

Residence: 475 Forestwood DR  
Columbus OH, 43234 Citizenship: U.S.A.

Full name of inventor: Regina Lach

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Philip Pointer

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.

Full name of inventor: Kenneth Cook

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence: \_\_\_\_\_  
\_\_\_\_\_ Citizenship: U.S.A.



Exhibit A

12/21/90 JPH IF CONSUMER PAYMENT IS LESS THAN MERCHANT  
CREDIT LIMIT, PROCESS PAYMENT AS ACH ITEM  
REGARDLESS OF THE CREDIT LIMIT TOTAL.  
EXCLUDE THESE ITEMS FROM ACCUMULATION  
OF ACH TRANSACTIONS INTO THE CREDIT LIMIT  
TOTAL.  
02/01/91 JPH EXPAND SOURCE CODE CHECK FOR PAY BY PHONE  
FROM 'N' TO 'N14'.  
03/08/91 JPH COMMIT WORKS AND RESTART PROCESSING.  
04/11/91 KAB CHANGED THE 'ROLLOVER DATE' HEADING TO  
'EXTRA PMT.' AND OMITTED THE 'ROLLOVER AMT'  
HEADING. ALSO, CHANGED THE DRAFT ERROR  
REPORT TO SHOW STATUS CODES AND ADDED TOTALS  
BY STATUS.  
04/19/91 PAM ADD CODE TO USE PAPER OR ELECTRONIC  
RT IF EFT CODE = 'B'.  
05/25/91 JUF ELECTRONIC REMITTANCE PROCESSING.  
06/05/91 JPH CORRECT PAYMENT ROLLOVER ERRORS FOR WEEKLY  
OR BIWEEKLY PAYMENTS.  
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ENVIRONMENT DIVISION.  
CONFIGURATION SECTION.  
INPUT-OUTPUT SECTION.  
FILE-CONTROL.

SELECT DATE-FILE ASSIGN TO DA-IDFILE  
ORGANIZATION IS INDEXED  
ACCESS MODE IS DYNAMIC  
RECORD KEY IS COMP-CTL-KEY  
FILE STATUS IS COMP-STATUS.  
05/25/91  
SELECT MERCHANT-FILE ASSIGN TO DA-MERCHANT  
ORGANIZATION IS INDEXED  
ACCESS MODE IS RANDOM  
RECORD KEY IS MMR-KEY  
FILE STATUS IS MMR-STAT.  
SELECT TRANHOLD-FILE ASSIGN TO UT-S-TNHOLD.  
SELECT DRFTTEN-FILE ASSIGN TO UT-S-DRFTTEN.  
SELECT ROLLOVER-REPORT ASSIGN TO UT-S-SYS020.  
000102 01/02/91  
000103 01/02/91  
000104 01/02/91  
000105 01/02/91  
000106 01/02/91  
000107 01/02/91  
000108 01/02/91  
000109 02/10/91  
000190 02/10/91  
000191 03/13/91  
000192 03/13/91  
000193 03/13/91  
000194 04/14/91  
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000196 04/14/91  
000197 04/14/91  
000198 04/14/91  
000199 04/14/91  
000200 04/28/91  
000201 04/28/91  
000202 04/28/91  
000203 06/05/91  
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000226 06/05/91  
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000228 06/05/91  
000229 06/05/91  
000230 06/05/91  
000231 06/05/91  
000232 06/05/91





# LISTING OF MODULE PDB00010

## LEVEL 88 SWITCHES

## 01 PROGRAM-INDICATORS.

05	PAYTBL-INPUT-EOF-SW	PIC X	VALUE 'N'.	000341	03/13/91
06	END-OF-TBLIN		VALUE 'Y'.	000342	03/13/92
06	NOT-END-OF-TBLIN		VALUE 'N'.	000343	03/13/91
05	INPUT-EOF-SW	PIC X	VALUE 'N'.	000345	03/13/91
06	EOF		VALUE 'Y'.	000346	
05	PAY-BY-PHONE-SW	PIC X	VALUE 'N'.	000347	
06	PAY-BY-PHONE		VALUE 'Y'.	000349	
05	IS-CONSUMER-IN-ERROR	PIC X	VALUE 'Y'.	000350	
06	CONSUMER-IN-ERROR		VALUE 'Y'.	000351	
05	ARE-MRCH-RO-HEADINGS-WRITTEN	PIC X	VALUE 'Y'.	000352	
06	MRCH-RO-HEADING-NOT-WRITTEN		VALUE 'N'.	000353	
05	ARE-CONS-RO-HEADINGS-WRITTEN	PIC X	VALUE 'Y'.	000354	
06	CONS-RO-HEADING-NOT-WRITTEN		VALUE 'N'.	000355	
05	ARE-MRCH-ERR-HEADINGS-WRITTEN	PIC X	VALUE 'Y'.	000356	
06	MRCH-ERR-HEADING-NOT-WRITTEN		VALUE 'N'.	000357	
05	ARE-CONS-ERR-HEADINGS-WRITTEN	PIC X	VALUE 'Y'.	000359	
06	CONS-ERR-HEADING-NOT-WRITTEN		VALUE 'N'.	000360	
05	ARE-MRCH-ERR-DETAIL-WRITTEN	PIC X	VALUE 'Y'.	000361	
06	MRCH-ERR-DETAIL-NOT-WRITTEN		VALUE 'N'.	000362	
05	ARE-CONS-ERR-DETAIL-WRITTEN	PIC X	VALUE 'Y'.	000363	
06	CONS-ERR-DETAIL-NOT-WRITTEN		VALUE 'N'.	000364	
05	ARE-MRCH-ERR-DETAIL-WRITTEN	PIC X	VALUE 'Y'.	000365	
06	MRCH-ERR-DETAIL-NOT-WRITTEN		VALUE 'N'.	000366	
05	ARE-CONS-RO-DETAIL-WRITTEN	PIC X	VALUE 'Y'.	000367	
06	CONS-RO-DETAIL-NOT-WRITTEN		VALUE 'N'.	000368	
05	ARE-MRCH-RO-DETAIL-WRITTEN	PIC X	VALUE 'Y'.	000369	
06	MRCH-RO-DETAIL-NOT-WRITTEN		VALUE 'N'.	000370	
05	IS-RECORD-IN-ERROR	PIC X	VALUE 'Y'.	000371	
06	RECORD-IN-ERROR		VALUE 'Y'.	000372	
05	IS-PAY-TABLE-ITEM-FOUND	PIC X	VALUE 'N'.	000373	
06	PAY-TABLE-ITEM-NOT-FOUND		VALUE 'Y'.	000374	
05	IS-PAY-TABLE-ITEM-FOUND	PIC X	VALUE 'Y'.	000375	
06	PAY-TABLE-ITEM-NOT-FOUND		VALUE 'N'.	000376	
05	IS-PAY-TABLE-SORTED	PIC X	VALUE 'N'.	000377	
06	PAY-TABLE-SORTED		VALUE 'Y'.	000378	
05	IS-PAY-TABLE-SORTED	PIC X	VALUE 'Y'.	000379	
06	PAY-TABLE-SORTED		VALUE 'N'.	000380	
05	IS-PAY-TABLE-ITEM-FOUND	PIC X	VALUE 'N'.	000381	
06	PAY-TABLE-ITEM-NOT-FOUND		VALUE 'Y'.	000382	
05	IS-PAY-TABLE-SORTED	PIC X	VALUE 'N'.	000383	
06	PAY-TABLE-SORTED		VALUE 'Y'.	000384	
05	IS-PAY-TABLE-SORTED	PIC X	VALUE 'N'.	000385	
06	PAY-TABLE-SORTED		VALUE 'Y'.	000386	



05	IS-THIS-FIRST-ERROR-RECORD	PIC X	VALUE 'Y'.	000437	03/13/91
06	FIRST-ERROR-RECORD		VALUE 'Y'.	000438	03/13/91
05	IS-THIS-FIRST-ROLL-RECORD	PIC X	VALUE 'Y'.	000439	03/13/91
06	FIRST-ROLL-RECORD		VALUE 'Y'.	000440	03/13/91
05	WS-77-HOLD-PAY-AMOUNT	PIC 9(07)V99	VALUE ZEROS.	000441	03/13/91
05	WS-77-HOLD-PAY-DATE	PIC 9(06)	VALUE ZEROS.	000442	03/13/91
05	WS-TOT-ERR-DOLLARS	PIC 9(7)V99	VALUE ZEROS.	000443	03/13/91
05	WS-TOT-ERR-ITEMS	PIC 9(7)	VALUE ZEROS.	000444	03/13/91
05	WS-TOT-RO-DOLLARS	PIC 9(7)V99	VALUE ZEROS.	000445	03/13/91
05	WS-TOT-RO-ITEMS	PIC 9(7)	VALUE ZEROS.	000446	03/13/91
05	WS-TOT-ERR-DOLLARS	PIC 9(7)V99	VALUE ZEROS.	000447	03/13/91
05	WS-TOT-ERR-ITEMS	PIC 9(7)	VALUE ZEROS.	000448	03/13/91
05	WS-TOT-RO-DOLLARS	PIC 9(7)V99	VALUE ZEROS.	000449	03/13/91
05	WS-TOT-RO-ITEMS	PIC 9(7)	VALUE ZEROS.	000450	03/13/91

THE FOLLOWING TWO FIELDS ARE USED TO KEEP TRACK OF THE NUMBER OF ITEMS AND DOLLARS IN ERROR FOR ALL CONSUMERS.

05	WS-GND-TOT-ERR-DOLLARS	PIC 9(7)V99	VALUE ZEROS.	000451	03/13/91
05 <th>WS-GND-TOT-ERR-ITEMS</th> <th>PIC 9(7)</th> <th>VALUE ZEROS.</th> <th>000452</th> <th>03/13/91</th>	WS-GND-TOT-ERR-ITEMS	PIC 9(7)	VALUE ZEROS.	000452	03/13/91
05 <th>WS-TOTAL-ERROR-LINES</th> <th>PIC 999</th> <th>VALUE 999.</th> <th>000453</th> <th>03/13/91</th>	WS-TOTAL-ERROR-LINES	PIC 999	VALUE 999.	000453	03/13/91
05 <th>WS-TOTAL-ROLLOVER-LINES</th> <th>PIC 999</th> <th>VALUE 999.</th> <th>000454</th> <th>03/13/91</th>	WS-TOTAL-ROLLOVER-LINES	PIC 999	VALUE 999.	000454	03/13/91
05 <th>WS-ERROR-PAGE-COUNT</th> <th>PIC 9(04)</th> <th>VALUE ZEROS.</th> <th>000455</th> <th>03/13/91</th>	WS-ERROR-PAGE-COUNT	PIC 9(04)	VALUE ZEROS.	000455	03/13/91
05 <th>WS-ROLLOVER-PAGE-COUNT</th> <th>PIC 9(04)</th> <th>VALUE ZEROS.</th> <th>000456</th> <th>03/13/91</th>	WS-ROLLOVER-PAGE-COUNT	PIC 9(04)	VALUE ZEROS.	000456	03/13/91
05 <th>WS-SUMMARY-PAGE-COUNT</th> <th>PIC 9(04)</th> <th>VALUE ZEROS.</th> <th>000457</th> <th>03/13/91</th>	WS-SUMMARY-PAGE-COUNT	PIC 9(04)	VALUE ZEROS.	000457	03/13/91
05 <th>WS-PREVIOUS-SSN</th> <th>PIC 9(9)</th> <th>VALUE ZEROS.</th> <th>000458</th> <th>03/13/91</th>	WS-PREVIOUS-SSN	PIC 9(9)	VALUE ZEROS.	000458	03/13/91
05 <th>WS-PREVIOUS-ERROR-SSN</th> <th>PIC 9(9)</th> <th>VALUE ZEROS.</th> <th>000459</th> <th>03/13/91</th>	WS-PREVIOUS-ERROR-SSN	PIC 9(9)	VALUE ZEROS.	000459	03/13/91
05 <th>WS-PREVIOUS-ROLL-SSN</th> <th>PIC 9(9)</th> <th>VALUE ZEROS.</th> <th>000460</th> <th>03/13/91</th>	WS-PREVIOUS-ROLL-SSN	PIC 9(9)	VALUE ZEROS.	000460	03/13/91
05 <th>TFR-COL-TOT-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000461</th> <th>03/13/91</th>	TFR-COL-TOT-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000461	03/13/91
05 <th>TFR-COL-TOT-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000462</th> <th>03/13/91</th>	TFR-COL-TOT-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000462	03/13/91
05 <th>TFR-COL-ACH-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000463</th> <th>03/13/91</th>	TFR-COL-ACH-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000463	03/13/91
05 <th>TFR-COL-ACH-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000464</th> <th>03/13/91</th>	TFR-COL-ACH-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000464	03/13/91
05 <th>TFR-COL-PPR-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000465</th> <th>03/13/91</th>	TFR-COL-PPR-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000465	03/13/91
05 <th>TFR-COL-PPR-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000466</th> <th>03/13/91</th>	TFR-COL-PPR-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000466	03/13/91
05 <th>TFR-COL-CHK-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000467</th> <th>03/13/91</th>	TFR-COL-CHK-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000467	03/13/91
05 <th>TFR-COL-CHK-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000468</th> <th>03/13/91</th>	TFR-COL-CHK-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000468	03/13/91
05 <th>TFR-RNT-TOT-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000469</th> <th>03/13/91</th>	TFR-RNT-TOT-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000469	03/13/91
05 <th>TFR-RNT-TOT-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000470</th> <th>03/13/91</th>	TFR-RNT-TOT-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000470	03/13/91
05 <th>TFR-RNT-ACH-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000471</th> <th>03/13/91</th>	TFR-RNT-ACH-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000471	03/13/91
05 <th>TFR-RNT-ACH-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000472</th> <th>03/13/91</th>	TFR-RNT-ACH-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000472	03/13/91
05 <th>TFR-RNT-PPR-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000473</th> <th>03/13/91</th>	TFR-RNT-PPR-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000473	03/13/91
05 <th>TFR-RNT-PPR-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000474</th> <th>03/13/91</th>	TFR-RNT-PPR-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000474	03/13/91
05 <th>TFR-RNT-CHK-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000475</th> <th>03/13/91</th>	TFR-RNT-CHK-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000475	03/13/91
05 <th>TFR-RNT-CHK-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000476</th> <th>03/13/91</th>	TFR-RNT-CHK-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000476	03/13/91
05 <th>TFR-RNT-TOT-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000477</th> <th>03/13/91</th>	TFR-RNT-TOT-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000477	03/13/91
05 <th>TFR-RNT-TOT-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000478</th> <th>03/13/91</th>	TFR-RNT-TOT-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000478	03/13/91
05 <th>TFR-RNT-ACH-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000479</th> <th>03/13/91</th>	TFR-RNT-ACH-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000479	03/13/91
05 <th>TFR-RNT-ACH-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000480</th> <th>03/13/91</th>	TFR-RNT-ACH-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000480	03/13/91
05 <th>TFR-RNT-PPR-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000481</th> <th>03/13/91</th>	TFR-RNT-PPR-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000481	03/13/91
05 <th>TFR-RNT-PPR-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000482</th> <th>03/13/91</th>	TFR-RNT-PPR-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000482	03/13/91
05 <th>TFR-RNT-CHK-ITEMS</th> <th>PIC S9(7)</th> <th>COMP-3 VALUE ZERO.</th> <th>000483</th> <th>03/13/91</th>	TFR-RNT-CHK-ITEMS	PIC S9(7)	COMP-3 VALUE ZERO.	000483	03/13/91
05 <th>TFR-RNT-CHK-DOLLARS</th> <th>PIC S9(9)V9(12)</th> <th>COMP-3 VALUE ZERO.</th> <th>000484</th> <th>03/13/91</th>	TFR-RNT-CHK-DOLLARS	PIC S9(9)V9(12)	COMP-3 VALUE ZERO.	000484	03/13/91

PROGRAM HOLD AREA \*

000485 03/13/91

000486 03/13/91

000487 03/13/91



\* SSN AREA \*

01 WS-SSN-AREA.

05 WS-SSN-IN.

10 WS-SSN-1ST3-IN  
10 WS-SSN-2ND2-IN  
10 WS-SSN-LAST4-IN

VALUE ZEROS.  
VALUE ZEROS.  
VALUE ZEROS.

05 WS-SSN-OUT.

10 WS-SSN-1ST3-OUT  
10 FILLER  
10 WS-SSN-2ND2-OUT  
10 FILLER  
10 WS-SSN-LAST4-OUT

VALUE ZEROS.  
VALUE "-".  
VALUE ZEROS.  
VALUE "-".  
VALUE ZEROS.

\*\*\*\*\*  
\* COMPARE VARIABLES \*

77 WS-CARDIN-SM

00 MORE-CARDIN  
00 NO-MORE-CARDIN

PIC X  
VALUE 'Y'.  
VALUE 'Y'.  
VALUE 'N'.

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77 WS-STATUS-A-CNT  
77 WS-STATUS-I-CNT  
77 WS-STATUS-F-CNT  
77 WS-STATUS-D-CNT  
77 WS-STATUS-P-CNT  
77 WS-STATUS-C-CNT  
77 WS-STATUS-TOT-CNT

PIC 9(6)  
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05/25/91

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\* PGM DATE FIELDS \*

01 WS-DATE-WORK.

05 WS-HOLD-DATE-FFHMDY.

10 HOLD-F-FFHMDY  
10 HOLD-M-FFHMDY  
10 HOLD-D-FFHMDY  
10 HOLD-Y-FFHMDY

VALUE ZEROS.  
VALUE ZEROS.  
VALUE ZEROS.  
VALUE ZEROS.

05 WS-HOLD-DATE.

10 HOLD-MONTH  
10 HOLD-DAY  
10 HOLD-YEAR

VALUE ZEROS.  
VALUE ZEROS.  
VALUE ZEROS.

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05	RO-HEADING-2.	PIC X(16).	000692	
10	FILLER	PIC X(152)	000693	
10	FILLER	PIC X(117)	000694	
10	RO-DRAFT-REPORT-DATE	PIC X(16).	000695	
10	FILLER	PIC X(15)	000696	
10	FILLER	PIC X(15)	000697	
10	RO-PAGE-NUMBER	PIC Z,ZZ9.	000698	
05	RO-HEADING-3.	PIC X(16)	000703	
10	FILLER	PIC X(103)	000704	
10	FILLER	PIC X(10)	000705	
10	FILLER	PIC X(109)	000706	
10	FILLER	PIC X(108)	000707	
10	FILLER	PIC X(110)	000708	
10	FILLER	PIC X(102)	000709	
10	FILLER	PIC X(102)	000710	
10	FILLER	PIC X(102)	000711	
10	FILLER	PIC X(102)	000712	
10	FILLER	PIC X(102)	000713	
10	FILLER	PIC X(102)	000714	
10	FILLER	PIC X(102)	000715	
10	FILLER	PIC X(104)	000716	
05	RO-HEADING-4.	PIC X(107)	000717	
10	FILLER	PIC X(105)	000718	
10	FILLER	PIC X(106)	000719	
10	FILLER	PIC X(103)	000720	
10	FILLER	PIC X(113)	000721	
10	FILLER	PIC X(100)	000722	
10	FILLER	PIC X(116)	000723	
10	FILLER	PIC X(114)	000724	
10	FILLER	PIC X(112)	000725	
10	FILLER	PIC X(106)	000726	
10	FILLER	PIC X(106)	000727	
10	FILLER	PIC X(106)	000728	
10	FILLER	PIC X(106)	000729	
10	FILLER	PIC X(106)	000730	
10	FILLER	PIC X(106)	000731	
10	FILLER	PIC X(106)	000732	
10	FILLER	PIC X(106)	000733	
10	FILLER	PIC X(106)	000734	
10	FILLER	PIC X(106)	000735	
10	FILLER	PIC X(106)	000736	
10	FILLER	PIC X(103)	000737	
10	FILLER	PIC X(103)	000738	
10	FILLER	PIC X(103)	000739	
10	FILLER	PIC X(103)	000740	
10	FILLER	PIC X(103)	000741	
10	FILLER	PIC X(106)	000742	





## LISTING OF MODULE PB00010

**PAGE 18**

10	FILLER	'LAST NAME'.	PIC X(09)	VALUE	000045	04/14/91
10	FILLER	'FIRST NAME'.	PIC X(08)	VALUE SPACES.	000046	
10	FILLER		PIC X(10)	VALUE	000047	
10	FILLER		PIC X(02)	VALUE SPACES.	000048	
10	FILLER	'MI'.	PIC X(02)	VALUE	000049	
10	FILLER		PIC X(01)	VALUE SPACES.	000050	
10	FILLER		PIC X(01)	VALUE SPACES.	000051	
10	FILLER	'REASON FOR REJECTS'.	PIC X(10)	VALUE	000052	
10	FILLER		PIC X(05)	VALUE SPACES.	000053	
05	ERR-HEADING-4.		PIC X(06)	VALUE SPACES.	000054	04/14/91
10	FILLER		PIC X(08)	VALUE	000055	04/14/91
10	FILLER	'PC PHONE'.	PIC X(03)	VALUE SPACES.	000056	04/14/91
10	FILLER		PIC X(03)	VALUE	000057	
10	FILLER	'CRP'.	PIC X(12)	VALUE SPACES.	000058	
10	FILLER		PIC X(08)	VALUE	000059	
10	FILLER	'MERCHANT'.	PIC X(16)	VALUE SPACES.	000060	
10	FILLER		PIC X(14)	VALUE	000061	
10	FILLER	'ACCOUNT NUMBER'.	PIC X(04)	VALUE SPACES.	000062	04/14/91
10	FILLER		PIC X(04)	VALUE	000063	
10	FILLER	'TYPE'.	PIC X(04)	VALUE SPACES.	000064	
10	FILLER		PIC X(06)	VALUE	000065	
10	FILLER	'AMOUNT'.	PIC X(05)	VALUE SPACES.	000066	
10	FILLER		PIC X(08)	VALUE	000067	
10	FILLER	'PAY DATE'.	PIC X(31)	VALUE SPACES.	000068	04/14/91
05	ERR-DETAIL-1.		PIC X(11)	VALUE SPACES.	000069	04/14/91
10	ERR-SSM		PIC X(02)	VALUE	000070	
10	ERR-LAST-NAME		PIC X(20)	VALUE SPACES.	000071	
10	FILLER		PIC X(01)	VALUE SPACES.	000072	
10	ERR-FIRST-NAME		PIC X(10)	VALUE SPACES.	000073	
10	FILLER		PIC X(02)	VALUE SPACES.	000074	
10	ERR-MI		PIC X(01)	VALUE SPACES.	000075	
10	FILLER		PIC X(54)	VALUE SPACES.	000076	
10	ERR-MESSAGE		PIC X(29)	VALUE SPACES.	000077	
10	FILLER		PIC X(01)	VALUE SPACES.	000078	









```

END-IF.
GO TO ENRCHK

IF PC-LAST-COMMIT-KEY NOT = SPACE
  DISPLAY 'RESTARTING PROGRAM ' MS-PROGRAM-NAME
  MOVE PC-LAST-COMMIT-KEY TO MS-LAST-KEY
  MOVE 'V' TO PC-RESTART-MODE
END-IF.

OPEN INPUT DATE-FILE.
OPEN INPUT CARDIN.

PERFORM A050-INITIALIZE THRU A050-INITIALIZE-EXIT.

CLOSE DATE-FILE.

* DELCARE CURSORS HERE.
*
MOVE 'DECLARE CURSOR T010' TO STEP-DENOTER.
EXEC SQL DECLARE T010 CURSOR FOR
  SELECT
    MS_SETTLE_CODE,
    MS_STATUS,
    MS_SETTLE_METH_IND
  FROM T010_MRCH_SETTLE
  WHERE
    MS_SETTLE_METH_IND = 'S' *
    AND MS_STATUS = 'A'
  ORDER BY MS_SETTLE_CODE
END-EXEC.

MOVE 'DECLARE CURSOR T002' TO STEP-DENOTER.
EXEC SQL DECLARE T002 CURSOR
  FOR SELECT
    CP_SSN,
    CP_CHK_PHONE,
    CP_CHK_CR_PHONE,
    CP_MRCH_PHONE,
    CP_MRCH_CR_PHONE,
    CP_MRCH_NAME,
    CP_MRCH_AMT,
    CP_MRCH_PAY_DATE,
    CP_PAY_TYPE,
    CP_NBR_RETAIN,
    CP_STATUS,
    CP_ACT_NBR,
    CP_PAY_FREQ,
    CP_CHG_DATE,
    CP_CHG_AMT,
    001099
  05/13/91
  001050
  05/13/91
  001051
  05/13/91
  001052
  05/13/91
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  001097
  001098
  001099

```



MOVE 'OPEN CURSOR 1002' TO STEP-DENOTER.  
 EXEC SQL OPEN 1002 END-EXEC.  
 OPEN OUTPUT TRANHOLD-FILE  
 PAY-TABLE-OUTPUT  
 DRFTITEM-FILE  
 ROLLOVER-REPORT  
 ERROR-REPORT  
 SUMMARY-REPORT.

PERFORM A100-MAIN THRU  
 A100-MAIN-EXIT.

MOVE 'CLOSE CURSOR 1002' TO STEP-DENOTER.  
 EXEC SQL CLOSE 1002 END-EXEC.

IF WS-TOTAL-ERROR-LINES > 40  
 PERFORM D100-ERROR-HEADINGS  
 THRU D100-ERROR-HEADINGS-EXIT.

MOVE 'TOTAL OF SSM BY STATUS A ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-A-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

MOVE 'TOTAL OF SSM BY STATUS I ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-I-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

MOVE 'TOTAL OF SSM BY STATUS F ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-F-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

MOVE 'TOTAL OF SSM BY STATUS D ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-D-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

MOVE 'TOTAL OF SSM BY STATUS P ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-P-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

MOVE 'TOTAL OF SSM BY STATUS C ' TO ERR-STATUS-DESC.  
 MOVE WS-STATUS-C-CNT TO ERR-STATUS-CNT.  
 MOVE ERR-DETAIL-3 TO ERROR-REPORT-LINE.  
 WRITE ERROR-REPORT-LINE.

001151 03/13/91  
 001152 03/13/91  
 001153 03/13/91  
 001154 01/02/91  
 001155 03/13/91  
 001156 01/02/91

001157  
 001158  
 001159  
 001160  
 001161 03/13/91  
 001162 03/13/91  
 001163

001164  
 001165  
 001166  
 001167 04/14/91  
 001168 04/14/91  
 001169 04/14/91  
 001170 04/14/91  
 001171 04/14/91  
 001172 04/14/91  
 001173 04/14/91  
 001174 04/14/91  
 001175 04/14/91  
 001176 04/14/91  
 001177 04/14/91  
 001178 04/14/91  
 001179 04/14/91  
 001180 04/14/91  
 001181 04/14/91  
 001182 04/14/91  
 001183 04/14/91  
 001184 04/14/91  
 001185 04/14/91  
 001186 04/14/91  
 001187 04/14/91  
 001188 04/14/91  
 001189 04/14/91  
 001190 04/14/91  
 001191 04/14/91  
 001192 04/14/91  
 001193 04/14/91  
 001194 04/14/91  
 001195 04/14/91  
 001196 04/14/91  
 001197 04/14/91  
 001198 04/14/91  
 001199 04/14/91  
 001200 04/14/91  
 001201 04/14/91

001202 04/14/91

COMPUTE MS-STATUS-TOT-CNT =	MS-STATUS-A-CNT +	001202	04/14/93
	MS-STATUS-I-CNT +	001203	04/14/93
	MS-STATUS-F-CNT +	001204	04/14/93
	MS-STATUS-D-CNT +	001205	04/14/93
	MS-STATUS-P-CNT +	001206	04/14/93
	MS-STATUS-C-CNT .	001207	04/14/93

**MOVE SPACES TO ERROR-REPORT-LINE.  
WRITE ERROR-REPORT-LINE.**

MOVE *TOTAL CONSUMERS IN ERROR *	TO ERR-STATUS-DESC.	001212
MOVE WS-STATUS-TOT-CNT	TO ERR-STATUS-CNT.	001213
MOVE ERR-DETAIL-3	TO ERR-REPORT-LINE.	001214
WRITE ERROR-REPORT-LINE.		001215
CLOSE MERCHANT-FILE,		001216
		001217

TRANHOLD-FILE,  
DRFITITEM-FILE,  
ROLLOVER-REPORT,  
ERROR-REPORT,  
SUMMARY-REPORT,  
CARDIN.

MOVE SPACE TO PC-LAST-COMMIT-KEY	001225	03/13/91
PC-RESTART-MODE.	001226	03/13/92D
PERFORM 9000-COMMIT-WORK THRU	001227	03/13/91
9000-EXIT	001228	03/13/92D
STOP RUN.	001229	

**A000-MAINLINE-EXIT.**  
**EXIT.**

A050=INITIALIZE.	001235	
ACCEPT WS-CURRENT-DATE FROM DATE.	001236	01/02/91
MOVE CD-YR TO WS-TRANS-YEAR.	001237	
MOVE CD-MONTH TO WS-TRANS-MONTH.	001238	
MOVE CD-DAY TO WS-TRANS-DAY.	001239	
ACCEPT WS-TIME FROM TIME.	001240	01/02/91
MOVE WS-HH TO WS-HOUR.	001241	
MOVE WS-MM TO WS-MIN.	001242	

```

MOVE WS-COMP-KEY TO COMP-CTL-KEY.
READ DATE-FILE INTO WS-DATE-RECORD.
IF COMP-STATUS = '00'
  NEXT SENTENCE
ELSE
  DISPLAY 'MESSAGE FROM ' SQL-PGM ': '
  DISPLAY 'BAD READ ON AECOMP DATE FILE.'
  DISPLAY 'STATUS CODE IS: ' COMP-STATUS
  DISPLAY 'PROGRAM HALTED.  STOP JOB '

```

[illegible]



```

IF MORE-CARDIN                                001304
READ CARDIN INTO WS-HOLD-ACH AT END           001305
MOVE 'N' TO WS-CARDIN-SW                     001306
ELSE                                           001307
MOVE SPACES TO WS-HOLD-ACH.                  001308
IF DAY-NIGHT-ACH NOT = 'B'.                   001309
AND                                             001310
DAY-NIGHT-ACH NOT = 'E'.                      001311
DISPLAY 'MESSAGE FROM ' SQL-PGM ':            001312
DISPLAY 'PROGRAM HALTED. ACH MODIFIER SET '   001313
DISPLAY 'IN JCL MUST BE EITHER B OR E.'       001314
DISPLAY 'STOP JOB STREAM AND CORRECT THIS '   001315
DISPLAY 'PROBLEM.'                            001316
DISPLAY '                                     '   001317
DISPLAY 'MESSAGE FROM ' SQL-PGM ':            001318
DISPLAY 'PROGRAM HALTED. ACH MODIFIER SET '   001319
DISPLAY 'IN JCL MUST BE EITHER B OR E.'       001320
DISPLAY 'STOP JOB STREAM AND CORRECT THIS '   001321
DISPLAY 'PROBLEM.'                            001322
DISPLAY '                                     '   001323
GO TO ERRCBK.                                 001324
                                              001325
MOVE DRAFT-EXTENSION-99 TO DATE-FREQ.         001326
PERFORM FUTURE-DATE THRU                     001327
FUTURE-DATE-EXIT.                           001328
PERFORM JULIAN-TO-GREGORIAN THRU             001329
JULIAN-TO-GREGORIAN-EXIT.                    001330
MOVE DATE-MM TO DATE-M.                      001331
MOVE DATE-DD TO DATE-D.                      001332
MOVE DATE-VV TO WS-YEAR-WORK.                001333
MOVE WS-VV-LAST12 TO DATE-Y.                 001334
MOVE DATE-MOV TO DRAFT-DATE-PLUS-DEF        001335
                                              001336
***** MOVE DRAFT-DATE-PLUS-DEF TO OUTPUT REPORT DATES.
MOVE DRAFT-DATE-PLUS-DEF TO WS-DATE-MDY.      001337
MOVE WS-M-MDY TO WS-M-MDY-SLASHES           001338
MOVE WS-D-MDY TO WS-D-MDY-SLASHES           001339
MOVE WS-Y-MDY TO WS-Y-MDY-SLASHES           001340
MOVE WS-DATE-MDY-WITH-SLASHES TO NO-DRAFT-REPORT-DATE,
ERR-DRAFT-DATE.                             001341
                                              001342
***** CONVERT DRAFT-DATE TO VYMMDD FORMAT FOR COMPARE ON T002.
MOVE DRAFT-DATE-PLUS-DEF TO WS-DATE-MDY.     001343
MOVE WS-Y-MDY TO WS-Y-YMD                   001344
MOVE WS-M-MDY TO WS-M-YMD                   001345
MOVE WS-D-MDY TO WS-D-YMD                   001346
MOVE WS-DATE-YMD TO WS-77-DATE              001347
MOVE WS-77-DATE TO SQL-DRAFT-DATE           001348
                                              001349
***** MOVE TODAY'S PROCESSING DATE TO OUTPUT RUN DATE.
MOVE AECD-CTL-TOD-PRO-DT TO WS-77-DATE-7DIGITS.
001350
001351
001352
001353
001354

```





```

END-EXEC.
IF SQLCODE EQUAL 100
  MOVE 'V' TO ALL-STLCODE-PROCESSED-SW.
AO79-READ-STLCODE-EXIT.
EXIT.

```

THE FOLLOWING MODULE IS THE MAIN INTERNAL DRIVER FOR THIS PROGRAM.

```

A100-MAIN.
PERFORM UNTIL EOF
  MOVE ZERO TO MS-COMMIT-COUNTER
  PERFORM A125-1002-CONS-PAY-FETCH
  THRU A125-1002-CONS-PAY-FETCH-EXIT
UNTIL EOF

```

**END-PERFORM.**

**IF WS-TOTAL-ROLLOVER-LINES > 0**

PERFORM C400-TOTAL-BREAK  
THRU C400-TOTAL-BREAK-EXIT.

**IF WS-TOTAL-ERROR-LINES > 0**

**AND NOT = 999**

PERFORM D400-TOTAL-BREAK  
THRU D400-TOTAL-BREAK-EXIT.  
PERFORM I100-CREDIT-OFFSETS  
THRU I100-CREDIT-OFFSETS-EXIT.  
PERFORM J200-WRITE-GRAND-SUMMARY  
THRU J200-WRITE-GRAND-SUMMARY-EXIT.

#### THE FOLLOWING WILL CREATE A GRAND TOTAL LINE ON THE DETAIL  
#### DRAFT REPORT.

**MOVE TFR-PMT-TOT-ITEMS TO GND-TOT-ROL-ITEMS.**

MOVE TFR-RNT-TOT-DOLLARS TO GND-TOT-ROL-DOLLARS.

**MOVE SPACES TO ROLLOVER-REPORT-LINE.**

**MOVE GND-TOT-ROL-DETAIL TO ROLLOVER-REPORT-LINE.**

**MOVE '0' TO CC-LINE**

**MOVE 2 TO ADVANCE-AMOUNT.**

## PERFORM C900-WRITE-ROLL-LINE

**THRU C900-WRITE-ROLL-LINE-EXIT.**

\*\*\* THE FOLLOWING WILL CREATE A GRAND TOTAL ERROR LINE ON THE  
\*\*\* DETAIL DRAFT REPORT.

**MOVE WS-GND-TOT-ERR-ITEMS TO GND-TOT-ERR-ITEMS.**

**MOVE WS-GND-TOT-ERR-DOLLARS TO GND-TOT-ERR-DOLLARS.**

**MOVE SPACES TO ROLLOVER-REPORT-LINE.**

001406	05/25/91
001407	05/25/91
001408	05/25/91
001409	05/25/91
001410	
001411	
001412	
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001416	
001417	
001418	03/13/91
001419	03/13/91
001420	03/13/91
001421	03/13/91
001422	03/13/91
001423	03/13/91
001424	03/13/91
001425	03/13/91
001426	
001427	
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001431	
001432	
001433	
001434	
001435	05/25/91
001436	
001437	05/25/91
001438	
001439	
001440	
001441	05/25/91
001442	
001443	05/25/91
001444	
001445	
001446	
001447	03/13/91
001448	
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001456	





THE FOLLOWING MODULES PRODUCE THE ROLLOVER REPORT FOR THIS PROGRAM.

## C100-ROLL-HEADINGS

```

MOVE 'N' TO ARE-CONS-RO-HEADINGS-WRITTEN.
MOVE 'N' TO ARE-NRCH-RO-HEADINGS-WRITTEN.
MOVE 'N' TO ARE-CONS-RO-DETAIL-WRITTEN.
MOVE 'N' TO ARE-NRCH-RO-DETAIL-WRITTEN.
MOVE ZEROS TO WS-TOTAL-ROLLOVER-LINES.
ADD 1 TO WS-ROLLOVER-PAGE-COUNT.
MOVE WS-ROLLOVER-PAGE-COUNT TO RO-PAGE-NUMBER
MOVE SPACES TO ROLLOVER-REPORT-LINE.
MOVE RO-HEADINGS-1 TO ROLLOVER-REPORT-LINE.
PERFORM C000-WRITE-ROLL-PAGE
      THRU C000-WRITE-ROLL-PAGE-EXIT.
MOVE SPACES TO ROLLOVER-REPORT-LINE.
MOVE . . TO CC-LINE
MOVE 1 TO ADVANCE-AMOUNT.
MOVE RO-HEADING-2 TO ROLLOVER-REPORT-LINE.
PERFORM C900-WRITE-ROLL-LINE
      THRU C900-WRITE-ROLL-LINE-EXIT.
C100-ROLL-HEADINGS-EXIT.
EXIT.

```

```

C200-CONSUMER-ROLL-LINE.
  IF FIRST-ROLL-RECORD
    MOVE 'N' TO IS-THIS-FIRST-ROLL-RECORD
    PERFORM C100-ROLL-HEADINGS
    THRU C100-ROLL-HEADINGS
  ELSE
    IF WS-TOTAL-ROLLOVER-LINES > 45
      AND
      CP-SSN NOT = WS-PREVIOUS-ROLL-SSN
      PERFORM C400-TOTAL-BREAK
      THRU C400-TOTAL-BREAK-EXIT
      PERFORM C100-ROLL-HEADINGS
      THRU C100-ROLL-HEADINGS-EXIT
    ELSE
      IF WS-TOTAL-ROLLOVER-LINES > 45
        AND
        CP-SSN = WS-PREVIOUS-ROLL-SSN
        PERFORM C100-ROLL-HEADINGS
        THRU C100-ROLL-HEADINGS-EXIT
      ELSE
        IF CP-SSN NOT = WS-PREVIOUS-ROLL-SSN
          PERFORM C400-TOTAL-BREAK

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001609	

**THRU C400-TOTAL-BREAK-EXIT.**

MOVE CP-SSN TO WS-PREVIOUS-ROLL-SSN.  
IF COMS-NO-HEADING-NOT-WRITTEN  
PERFORM C210-CONSUMER-HEADINGS-EXIT.  
THRU C210-CONSUMER-DETAILS-EXIT.  
PERFORM C220-CONSUMER-DETAIL  
THRU C220-CONSUMER-DETAIL-EXIT.  
C200-CONSUMER-ROLL-LINE-EXIT.  
EXIT.

C210-CONSUMER-HEADINGS.  
MOVE 'V' TO ABE-CONS-RO-HEADINGS-WRITTEN.  
MOVE SPACES TO ROLLOVER-REPORT-LINE.  
MOVE '-' TO CC-LINE  
MOVE 3 TO ADVANCE-AMOUNT.  
MOVE RO-HEADINGS-3 TO ROLLOVER-REPORT-LINE.  
PERFORM C900-WRITE-ROLL-LINE  
THRU C900-WRITE-ROLL-LINE-EXIT.  
C210-CONSUMER-HEADINGS-EXIT.  
EXIT.

C220-CONSUMER-DETAIL.  
MOVE 'Y' TO ARE-CONS-RO-DETAIL-WRITTEN.  
  
MOVE CP-SSN TO WS-77-SSN.  
MOVE WS-77-SSN TO WS-SSN-IN.  
MOVE WS-SSN-1ST3-IN TO WS-SSN-1ST3-OUT.  
MOVE WS-SSN-2ND2-IN TO WS-SSN-2ND2-OUT.  
MOVE WS-SSN-LAST4-IN TO WS-SSN-LAST4-OUT.  
MOVE WS-SSN-OUT TO RO-SSN.  
MOVE CF-LAST-NAME TO RO-LAST-NAME.  
MOVE CF-FIRST-NAME TO RO-FIRST-NAME.  
MOVE CF-MID-INIT TO RO-MI.  
  
MOVE SPACES TO ROLLOVER-REPORT-LINE.  
MOVE ' ' TO CC-LINE  
MOVE 1 TO ADVANCE-AMOUNT.  
MOVE RO-DETAIL-1 TO ROLLOVER-REPORT-LINE.  
PERFORM C900-WRITE-ROLL-LINE  
THRU C900-WRITE-ROLL-LINE-EXIT.  
C220-CONSUMER-DETAIL-EXIT.  
EXIT.

C300-MERCHANT-ROLL-LINE.  
IF MS-TOTAL-ROLLOVER-LINES > 55  
PERFORM C100-ROLL-HEADINGS  
THRU C100-ROLL-HEADINGS-EXIT.

001610	
001611	
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IF CONS-RO-HEADING-NOT-WRITTEN  
PERFORM C210-CONSUMER-HEADINGS-EXIT.  
IF CONS-RO-DETAIL-NOT-WRITTEN  
PERFORM C220-CONSUMER-DETAIL  
THRU C220-CONSUMER-DETAIL-EXIT.  
IF MRCH-RO-HEADING-NOT-WRITTEN  
PERFORM C310-MERCHANT-HEADINGS  
THRU C310-MERCHANT-HEADINGS-EXIT.  
PERFORM C320-MERCHANT-DETAIL  
THRU C320-MERCHANT-DETAIL-EXIT.  
C300-MERCHANT-ROLL-LINE-EXIT.  
EXIT.

```

C310-MERCHANT-HEADINGS.
MOVE 'V' TO AAE-HIGH-RO-HEADINGS-WRITTEN.
MOVE SPACES TO ROLL-OVER-REPORT-LINE.
MOVE '0' TO CC-LINE
MOVE 2 TO ADVANCE-AMOUNT.
MOVE RO-HEADINGS-4 TO ROLL-OVER-REPORT-LINE.
PERFORM C900-WRITE-ROLL-LINE
THRU C900-WRITE-ROLL-LINE-EXIT.
C310-MERCHANT-HEADINGS-EXIT.
EXIT.

```

C320-MERCHANT-DETAIL.  
MOVE CP-MNCH-PHONE TO WS-77-PHONE.  
MOVE WS-77-PHONE TO MS-PHONE-NUMBER-IN  
MOVE WS-AREA-CODE-IN TO WS-AREA-CODE-OUT  
MOVE MS-PHONE-EXCHG-IN TO MS-PHONE-EXCHG-OUT  
MOVE WS-PHONE-EXT-IN TO WS-PHONE-EXT-OUT  
MOVE WS-PHONE-NUMBER-OUT TO RO-PHONE-NUMBER  
MOVE CP-MNCH-CR-PHONE TO RO-CRP  
MOVE CP-MNCH-NAME TO RO-MERCHANT  
MOVE CP-ACT-NBR TO RO-ACCOUNT-NUMBER  
  
MOVE SPACES TO ROLLOVER-REPORT-LINE.  
MOVE \* \* TO CC-LINE  
MOVE 1 TO ADVANCE-AMOUNT.  
MOVE RO-DETAIL-2 TO ROLLOVER-REPORT-LINE.  
PERFORM C300-WRITE-ROLL-LINE  
THRU C300-WRITE-ROLL-LINE-EXIT.  
ADD WS-77-HOLD-PAY-AMOUNT TO WS-TOT-RO-DOLLARS  
ADD 1 TO WS-TOT-RO-ITEMS.  
C320-MERCHANT-DETAIL-EXIT.  
EXIT.

**C400-TOTAL-BREAK.**

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001711



```

ADD 1 TO WS-ERROR-PAGE-COUNT.
MOVE WS-ERROR-PAGE-COUNT TO ERR-PAGE-NUMBER.
MOVE SPACES TO ERROR-REPORT-LINE.
MOVE ERR-HEADING-1 TO ERROR-REPORT-LINE.
PERFORM D000-WRITE-ERROR-PAGE
    THRU D000-WRITE-ERROR-REPORT-LINE.
MOVE SPACES TO ERROR-REPORT-LINE.
MOVE * TO CC-LINE.
MOVE 1 TO ADVANCE-AMOUNT.
MOVE ERR-HEADING-2 TO ERROR-REPORT-LINE.
PERFORM D900-WRITE-ERROR-LINE
    THRU D900-WRITE-ERROR-LINE-EXIT.
D100-ERROR-HEADINGS-EXIT.
EXIT.

```

```

D200-C-CONSUMER-ERROR-LINE.
IF CF-STATUS = 'A'
  ADD 1 TO WS-STATUS-A-CNT
ELSE
  IF CF-STATUS = 'I'
    ADD 1 TO WS-STATUS-I-CNT
  ELSE
    IF CF-STATUS = 'F'
      ADD 1 TO WS-STATUS-F-CNT
    ELSE
      IF CF-STATUS = 'D'
        ADD 1 TO WS-STATUS-D-CNT
      ELSE
        IF CF-STATUS = 'P'
          ADD 1 TO WS-STATUS-P-CNT
        ELSE
          IF CF-STATUS = 'C'
            ADD 1 TO WS-STATUS-C-CNT.
          ELSE
            ADD 1 TO WS-STATUS-C-CNT.
        END
      END
    END
  END
END
MOVE 'CONSUMER STATUS IS ' TO WS-ERR-STATUS.
MOVE CF-STATUS TO WS-ERR-STATUS.
MOVE WS-STATUS-STATUS TO WS-ERR-STATUS.
IF FIRST-ERROR-RECORD
  MOVE 'N' TO IS-FIRST-ERROR-RECORD
  PERFORM D100-ERROR-HEADINGS
  THRU D100-ERROR-HEADINGS
ELSE
  IF WS-TOTAL-ERROR-LINES > 45
    AND
    CP-SSN NOT = WS-PREVIOUS-ERROR-SSN
    PERFORM D400-TOTAL-BREAK
    THRU D400-TOTAL-BREAK-EXIT
    PERFORM D100-ERROR-HEADINGS
    THRU D100-ERROR-HEADINGS-EXIT
  END
END

```



ELSE	001014
IF WS-TOTAL-ERROR-LINES > 45	001015
AND	001016
CP-SSN = WS-PREVIOUS-ERROR-SSN	001017
PERFORM D100-ERROR-HEADINGS	001018
THRU D100-ERROR-HEADINGS-EXIT	001019
ELSE	001020
IF CP-SSN NOT = WS-PREVIOUS-ERROR-SSN	001021
PERFORM D400-TOTAL-BREAK	001022
THRU D400-TOTAL-BREAK-EXIT.	001023
	001024
MOVE CP-SSN TO WS-PREVIOUS-ERROR-SSN.	001025
IF CONS-ERR-HEADING-NOT-WRITTEN	001026
PERFORM D210-CONSUMER-HEADINGS	001027
THRU D210-CONSUMER-HEADINGS-EXIT.	001028
IF CONS-ERR-DETAIL-NOT-WRITTEN	001029
PERFORM D220-CONSUMER-DETAIL	001030
THRU D220-CONSUMER-DETAIL-EXIT.	001031
	001032
	001033
	001034
* MOVE SPACES TO ERROR-REPORT-LINE.	001035
* MOVE ' ' TO CC-LINE.	001036
* MOVE 1 TO ADVANCE-AMOUNT.	001037
* MOVE WS-ERR-MESSAGE-LINE TO ERROR-REPORT-LINE.	001038
* PERFORM D900-WRITE-ERROR-LINE	001039
* THRU D900-WRITE-ERROR-LINE-EXIT.	001040
	001041
MOVE SPACES TO WS-ERR-MESSAGE.	001042
MOVE SPACE TO WS-ERR-STATUS.	001043
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[illegible]

MOVE WS-SSN-2ND2-IN TO WS-SSN-2ND2-OUT.	001865	04/14/91
MOVE WS-SSN-LAST4-IN TO WS-SSN-LAST4-OUT.	001866	
MOVE WS-SSN-OUT TO ERR-SSN.	001867	04/14/91
MOVE CF-LAST-NAME TO ERR-LAST-NAME.	001868	04/14/91
MOVE CF-FIRST-NAME TO ERR-FIRST-NAME.	001869	04/14/91
MOVE CF-MID-INIT TO ERR-MI.	001870	04/14/91
MOVE WS-ERR-MSG TO ERR-MSG.	001871	04/14/91
	001872	04/14/91
	001873	
	001874	
MOVE SPACES TO ERROR-REPORT-LINE.	001875	03/13/91
MOVE ' ' TO CC-LINE	001876	
MOVE 1 TO ADVANCE-AMOUNT.	001877	
MOVE ERR-DETAIL-1 TO ERROR-REPORT-LINE.	001878	
PERFORM D900-WRITE-ERROR-LINE	001879	
THRU D900-WRITE-ERROR-LINE-EXIT.	001880	
D220-CONSUMER-DETAIL-EXIT.	001881	
EXIT.	001882	
	001883	
	001884	
	001885	
D300-MERCHANT-ERROR-LINE.	001886	
IF FIRST-ERROR-RECORD	001887	
MOVE 'N' TO IS-THIS-FIRST-ERROR-RECORD	001888	
PERFORM D100-ERROR-HEADINGS	001889	
THRU D100-ERROR-HEADINGS	001890	
ELSE	001891	
IF WS-TOTAL-ERROR-LINES > 45	001892	
AND	001893	03/13/91
CP-SSN NOT = WS-PREVIOUS-ERROR-SSN	001894	03/13/91
AND	001895	
MRC-ERR-DETAIL-NOT-WRITTEN	001896	
PERFORM D400-TOTAL-BREAK	001897	
THRU D400-TOTAL-BREAK-EXIT	001898	
PERFORM D100-ERROR-HEADINGS	001899	
THRU D100-ERROR-HEADINGS-EXIT	001900	
ELSE	001901	
IF WS-TOTAL-ERROR-LINES > 45	001902	
AND	001903	03/13/91
CP-SSN = WS-PREVIOUS-ERROR-SSN	001904	03/13/91
AND	001905	
MRC-ERR-DETAIL-NOT-WRITTEN	001906	
PERFORM D100-ERROR-HEADINGS	001907	
THRU D100-ERROR-HEADINGS-EXIT	001908	
ELSE	001909	
IF CP-SSN NOT = WS-PREVIOUS-ERROR-SSN	001910	
PERFORM D400-TOTAL-BREAK	001911	
THRU D400-TOTAL-BREAK-EXIT.	001912	
IF WS-TOTAL-ERROR-LINES > 55	001913	
PERFORM D100-ERROR-HEADINGS	001914	
THRU D100-ERROR-HEADINGS-EXIT.	001915	
IF COMS-ERR-HEADING-NOT-WRITTEN		

PERFORM D210-CONSUMER-HEADINGS	001916
THRU D210-CONSUMER-HEADINGS-EXIT.	
IF CONS-ERR-DETAIL-NOT-WRITTEN	001917
PERFORM D220-CONSUMER-DETAIL	001918
THRU D220-CONSUMER-DETAIL-EXIT.	001919
IF MRCH-ERR-HEADING-NOT-WRITTEN	001920
PERFORM D310-MERCHANT-HEADINGS	001921
THRU D310-MERCHANT-HEADINGS-EXIT.	001922
IF MRCH-ERR-DETAIL-NOT-WRITTEN	001923
PERFORM D320-MERCHANT-DETAIL	001924
THRU D320-MERCHANT-DETAIL-EXIT	001925
GO TO D300-MERCHANT-ERROR-LINE-EXIT.	001926
	001927
	001928
	001929
MOVE SPACES TO ERROR-REPORT-LINE.	001930
MOVE ' ' TO CC-LINE.	001931
MOVE 1 TO ADVANCE-AMOUNT.	001932
MOVE WS-ERR-MESSAGE-LINE TO ERROR-REPORT-LINE.	001933
PERFORM D900-WRITE-ERROR-LINE	001934
THRU D900-WRITE-ERROR-LINE-EXIT.	001935
	001936
MOVE SPACES TO ERROR-REPORT-LINE.	001937
D300-MERCHANT-ERROR-LINE-EXIT.	001938
EXIT.	001939
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Variable	Mean	Standard Deviation	Minimum	Maximum
Age	34.5	10.2	21	55
Gender	0.5	0.5	0	1
Marital Status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	35000	15000	10000	70000
Health	0.8	0.2	0	1
Smoking	0.3	0.5	0	1
Drinking	0.2	0.4	0	1
Exercise	0.4	0.5	0	1
Stress	0.6	0.5	0	1
Sleep	0.7	0.3	0	1
Work	0.8	0.2	0	1
Family	0.9	0.1	0	1
Friends	0.7	0.4	0	1
Community	0.6	0.5	0	1
Society	0.5	0.5	0	1
Nature	0.4	0.5	0	1
Art	0.3	0.5	0	1
Science	0.2	0.4	0	1
History	0.1	0.3	0	1
Philosophy	0.0	0.2	0	1
Religion	0.0	0.1	0	1
Politics	0.0	0.1	0	1
Law	0.0	0.1	0	1
Medicine	0.0	0.1	0	1
Engineering	0.0	0.1	0	1
Business	0.0	0.1	0	1
Education	0.0	0.1	0	1
Health	0.0	0.1	0	1
Smoking	0.0	0.1	0	1
Drinking	0.0	0.1	0	1
Exercise	0.0	0.1	0	1
Stress	0.0	0.1	0	1
Sleep	0.0	0.1	0	1
Work	0.0	0.1	0	1
Family	0.0	0.1	0	1
Friends	0.0	0.1	0	1
Community	0.0	0.1	0	1
Society	0.0	0.1	0	1
Nature	0.0	0.1	0	1
Art	0.0	0.1	0	1
Science	0.0	0.1	0	1
History	0.0	0.1	0	1
Philosophy	0.0	0.1	0	1
Religion	0.0	0.1	0	1
Politics	0.0	0.1	0	1
Law	0.0	0.1	0	1
Medicine	0.0	0.1	0	1
Engineering	0.0	0.1	0	1
Business	0.0	0.1	0	1
Education	0.0	0.1	0	1
Health	0.0	0.1	0	1
Smoking	0.0	0.1	0	1
Drinking	0.0	0.1	0	1
Exercise	0.0	0.1	0	1
Stress	0.0	0.1	0	1
Sleep	0.0	0.1	0	1
Work	0.0	0.1	0	1
Family	0.0	0.1	0	1
Friends	0.0	0.1	0	1
Community	0.0	0.1	0	1
Society	0.0	0.1	0	1
Nature	0.0	0.1	0	1
Art	0.0	0.1	0	1
Science	0.0	0.1	0	1
History	0.0	0.1	0	1
Philosophy	0.0	0.1	0	1
Religion	0.0	0.1	0	1
Politics	0.0	0.1	0	1
Law	0.0	0.1	0	1
Medicine	0.0	0.1	0	1
Engineering	0.0	0.1	0	1
Business	0.0	0.1	0	1
Education	0.0	0.1	0	1
Health	0.0	0.1	0	1
Smoking	0.0	0.1	0	1
Drinking	0.0	0.1	0	1
Exercise	0.0	0.1	0	1
Stress	0.0	0.1	0	1
Sleep	0.0	0.1	0	1
Work	0.0	0.1	0	1
Family	0.0	0.1	0	1
Friends	0.0	0.1	0	1
Community	0.0	0.1	0	1
Society	0.0	0.1	0	1
Nature	0.0	0.1	0	1
Art	0.0	0.1	0	





# LISTING OF MODULE PDB00010

CF_CREDIT_LIMIT,	002069
CF_CHECK_LIMIT,	002070
CF_CF_MTH_ITEMS,	002071
CF_CF_MTH_BAL,	002072
CF_CF_YTD_ITEMS,	002073
CF_CF_YTD_BAL,	002074
CF_TOT_MTH_ITEMS,	002075
CF_TOT_MTH_BAL,	002076
CF_TOT_YTD_ITEMS,	002077
CF_TOT_YTD_BAL,	002078
CF_FREE_FLAG,	002079
CF_NBR_FREE,	002080
CF_FEE_MATRIX,	002081
CF_PRENOTE_DATE,	002082
CF_EFT_CODE,	002083
CF_BANK_NAME,	002084
CF_CHECK_SAVE,	002085
CF_RESET_PRENOTE	002086
INTO	002087
:CF-SSN,	002088
:CF-CHECK-ID,	002089
:CF-LAST-NAME,	002090
:CF-FIRST-NAME,	002091
:CF-MID-INIT,	002092
:CF-ADDRESS1,	002093
:CF-ADDRESS2,	002094
:CF-CITY,	002095
:CF-STATE,	002096
:CF-ZIP,	002097
:CF-ZIP-4,	002098
:CF-ROUTE-TRANS,	002099
:CF-ACCT-NBR,	002100
:CF-PAPR-RT-TRANS,	002101
:CF-PAPR-ACCT-NBR,	002102
:CF-CCARD-NBR,	002103
:CF-CCARD-EXP-DATE,	002104
:CF-MAIDEN-NAME,	002105
:CF-DECLINE-STATUS,	002106
:CF-STATUS,	002107
:CF-VIP-STATUS,	002108
:CF-VIP-STATUS2,	002109
:CF-LAST-TRANS-DATE,	002110
:CF-CREDIT-LIMIT,	002111
:CF-CHECK-LIMIT,	002112
:CF-CF-MTH-ITEMS,	002113
:CF-CF-MTH-BAL,	002114
:CF-CF-YTD-ITEMS,	002115
:CF-CF-YTD-BAL,	002116
:CF-TOT-MTH-ITEMS,	002117
:CF-TOT-MTH-BAL,	002118
:CF-TOT-YTD-ITEMS,	002119









```
ELSE  
IF NMR-ROUTE-SETTLE = '12'  
MOVE '.03' TO NMR-ROUTE-SETTLE  
ELSE  
MOVE '.01' TO NMR-ROUTE-SETTLE
```

THE FOLLOWING MODULE CHECKS FOR PAYMENT ROLLOVER AND MOVES  
THOSE VALUES TO PROPER FIELDS IN TABLE T002, CONSUMER PAY

\* MOVE CURRENT VALUES FOR THESE FIELDS TO THE OUTPUT REPORT  
\* BEFORE THEY ARE ROLLED FORWARD.

```
MOVE ZEROS TO DATE-#WDDYVVV
MOVE ZEROS TO DATE-#VVVVVDD
MOVE ZEROS TO DATE-RED-1
MOVE ZEROS TO DATE-RED-2
MOVE ZEROS TO DATE-RED-3
MOVE ZEROS TO DATE-#WDDYV
```

\*\*\*\*\* ROLL PAYMENT DATE FORWARD.  
IF (CP-NBR-REMAIN > 0





```
MOVE DATE-Y-EOM TO DATE-Y
PERFORM END-OF-MONTH THRU
      END-OF-MONTH-EXIT
MOVE DATE-M TO DATE-M-EOM
MOVE DATE-D TO DATE-D-EOM
MOVE DATE-Y TO DATE-Y-EOM
MOVE DATE-EOM TO DATE-WMDDVVVV.
```

**FL15-CHECK-MONTH-END-EXIT.**  
**EXIT.**

```

* THE FOLLOWING MODULE GETS THE CORRECT VALUES TO BE PASSED THE
* DATE ROUTINES FOR FUTURE DATE CALCULATIONS.

```

### F120-GET-ROLL-VALUES.

```

IF CP-PAY-FREQ = 'A'
  MOVE 'M' TO DATE-PERIOD
  MOVE 12 TO DATE-FREQ.
IF CP-PAY-FREQ = 'B'
  MOVE 'D' TO DATE-PERIOD
  MOVE 14 TO DATE-FREQ.
IF CP-PAY-FREQ = 'M'
  MOVE 'M' TO DATE-PERIOD
  MOVE 1 TO DATE-FREQ.
IF CP-PAY-FREQ = 'Q'
  MOVE 'M' TO DATE-PERIOD
  MOVE 3 TO DATE-FREQ.
IF CP-PAY-FREQ = 'S'
  MOVE 'M' TO DATE-PERIOD
  MOVE 6 TO DATE-FREQ.
IF CP-PAY-FREQ = 'T'
  MOVE 'M' TO DATE-PERIOD
  MOVE 4 TO DATE-FREQ.
IF CP-PAY-FREQ = 'W'
  MOVE 'D' TO DATE-PERIOD
  MOVE 7 TO DATE-FREQ.
F120-GET-ROLL-VALUES-EXIT.
EXIT.

```

THE FOLLOWING MODULES CREATE THE CREDIT AND DEBITS RECORDS AND LOADS THEM INTO THE TRANSHOLD.

6100-TRANHOLD-RECORD.  
ADD WS-77-HOLD-PAY-AMOUNT TO CF-TOT-MTH-BAL,  
CF-TOT-YTD-BAL,  
TFR-COL-TOT-DOLLARS,

002426
002427
002428
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002476
05/25/91



Code	Description	Effective Date
002528	ELSE	
002529	IF CF-EFT-CODE = 'E' OR 'B'	04/20/91
002530	IF IMR-MC-ACCT-SCHEME-CHECK = 'Y' AND	10/31/90
002531	(CP-ACCT-SCHEME = 'R' OR	10/31/90
002532	CP-ACCT-SCHEME = 'N')	10/31/90
002533	PERFORM G130-PAPER-ITEMS	10/31/90
002534	THRU G130-PAPER-ITEMS-EXIT	10/31/90
002535	ELSE	10/31/90
002536	IF WS-77-HOLD-PAY-AMOUNT < WS-CREDIT-LIMIT AND	01/02/91
002537	CF-CHECK-LIMIT > ZEROS	
002538	PERFORM G140-ACH-ITEMS	
002539	THRU G140-ACH-ITEMS-EXIT	
002540	ELSE	
002541	IF WS-77-HOLD-PAY-AMOUNT < CF-CHECK-LIMIT	
002542	OR = CF-CHECK-LIMIT	
002543	ADD WS-77-HOLD-PAY-AMOUNT TO CF-CF-MTH-BAL	
002544	IF CF-CF-MTH-BAL < CF-CREDIT-LIMIT	
002545	OR = CF-CREDIT-LIMIT	
002546	PERFORM G140-ACH-ITEMS	
002547	THRU G140-ACH-ITEMS-EXIT	
002548	ELSE	
002549	SUBTRACT WS-77-HOLD-PAY-AMOUNT	
002550	FROM CF-CF-MTH-BAL	
002551	PERFORM G130-PAPER-ITEMS	
002552	THRU G130-PAPER-ITEMS-EXIT	
002553	ELSE	
002554	PERFORM G130-PAPER-ITEMS	
002555	THRU G130-PAPER-ITEMS-EXIT	
002556	ELSE	
002557	PERFORM G130-PAPER-ITEMS	
002558	THRU G130-PAPER-ITEMS-EXIT	
002559	ELSE	
002560	MOVE '2'	
002561	TO PDR-DB-CR-CODE.	
002562	MOVE CP-MRCH-PHONE	
002563	TO PDR-MRCH-PHONE.	
002564	MOVE CP-MRCH-CR-PHONE	
002565	TO PDR-MRCH-ADDR1.	
002566	MOVE IMR-REMIT-ADDR2	
002567	TO PDR-MRCH-ADDR2.	
002568	MOVE IMR-REMIT-CITY	
002569	TO PDR-MRCH-CITY.	
002570	MOVE IMR-REMIT-ST	
002571	TO PDR-MRCH-STATE.	
002572	MOVE IMR-REMIT-ZIP	
002573	TO PDR-MRCH-ZIP.	
002574	MOVE IMR-ROUTE-SETTLE	
002575	TO PDR-MRCH-SETTLE.	
002576	MOVE CP-SSN	
002577	TO PDR-CUST-SSN.	
002578	MOVE CP-FIRST-NAME	
002579	TO PDR-CUST-NAME.	
002580	MOVE CF-LAST-NAME	
002581	TO PDR-LAST-NAME.	
002582	MOVE CF-MID-INIT	
002583	TO PDR-MID-INIT.	
002584	MOVE CP-ACCT-NBR TO PDR-CUST-ACCT.	
002585	PERFORM CHECK-EFT-CODE THRU CHECK-EXIT.	
002586	MOVE CF-CHECK-SAVE	
002587	TO PDR-CHECK-SAVE.	
002588	MOVE WS-77-HOLD-PAY-DATE TO PDR-PROC-DATE.	
002589	MOVE WS-77-HOLD-PAY-AMOUNT TO PDR-AMT.	
002590	MOVE 'PAYMENT' TO PDR-DESCRIPTION.	







## LISTING OF MODULE PAB00010

```

MOVE PDR-MRCH-PHONE TO CHP-CROSS-R-PHONE.
MOVE PDR-MRCH-CR-PHONE TO CHP-CHECK-CR-PHONE.
MOVE PDR-LAST-NAME TO CHP-LAST-NAME.
MOVE PDR-FIRST-NAME TO CHP-FIRST-NAME.
MOVE PDR-MID-INIT TO CHP-MID-INIT.
MOVE PDR-MRCH-PHONE TO CHP-MRCH-PHONE.
MOVE PDR-MRCH-CR-PHONE TO CHP-MRCH-CR-PHONE.
MOVE MMR-NAME TO CHP-MRCH-NAME.
MOVE PDR-AMT TO CHP-MRCH-AMT.
MOVE PDR-PROC-DATE TO CHP-PAY-DATE.
MOVE PDR-CUST-ACCT TO CHP-ACCT-NBR.
MOVE PDR-JUL-DATE TO CHP-JUL-DATE
MOVE ZEROS TO CHP-CHECK-NBR
      CHP-RTN-DATE.
MOVE SPACES TO CHP-RTN-REASON
      CHP-RTN-STATUS
      CHP-RTN-COMMENT.
MOVE CP-LAST-TRANS-DATE TO CHP-LST-TRANS-DATE
MOVE PDR-TRACK-NBR TO CHP-TRACK-NBR.
MOVE .INSECT INTO T006 IN PARAGRAPH 6150.
      TO STEP-DEMONSTR.

```

```
EXEC SQL INSERT
INTO T006_CONS_MIST_PAY
(CHP_SSN,
 CHP_CROSS_R_PHONE,
 CHP_CHK_CR_PHONE,
 CHP_LAST_NAME,
 CHP_FIRST_NAME,
 CHP_MID_INIT,
 CHP_MRCH_PHONE,
 CHP_MRCH_CR_PHONE,
 CHP_MRCH_AMT,
 CHP_PAY_DATE,
 CHP_METH_PAY,
 CHP_ACCT_NBR,
 CHP_JUL_DATE,
 CHP_CHECK_NBR,
 CHP_RTN_DATE,
 CHP_RTN_REASON,
 CHP_RTN_STATUS,
 CHP_RTN_COMMENT,
 CHP_LST_TRANS_DATE,
 CHP_TRACK_NBR)
VALUES
(:CHP_SSN,
:CHP_CROSS_R_PHONE,
:CHP_CHK_CR_PHONE,
:CHP_LAST_NAME,
:CHP_FIRST_NAME,
:CHP_MID_INIT,
:CHP_MRCH_PHONE,
:CHP_MRCH_CR_PHONE,
:CHP_MRCH_AMT,
:CHP_PAY_DATE,
:CHP_METH_PAY,
:CHP_ACCT_NBR,
:CHP_JUL_DATE,
:CHP_CHECK_NBR,
:CHP_RTN_DATE,
:CHP_RTN_REASON,
:CHP_RTN_STATUS,
:CHP_RTN_COMMENT,
:CHP_LST_TRANS_DATE,
:CHP_TRACK_NBR)
002703
002704
002705
002706
002707
002708
002709
002710
002711
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002714
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002718
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002731
05/25/91
05/25/91
```

002732	:CHP-MID-INIT,
002733	:CHP-MRCH-PHONE,
002734	:CHP-MRCH-CR-PHONE,
002735	:CHP-MRCH-NAME,
002736	:CHP-MRCH-AMT,
002737	:CHP-PAY-DATE,
002738	:CHP-METH-PAY,
002739	:CHP-ACCT-NBR,
002740	:CHP-JUL-DATE,
002741	:CHP-CHECK-NBR,
002742	:CHP-RTN-DATE,
002743	:CHP-RTN-REASON,
002744	:CHP-RTN-STATUS,
002745	:CHP-RTN-COMMENT,
002746	:CHP-LSI-TRANS-DATE,
002747	:CHP-TRACK-NBR)
002748	END-EXEC.
002749	GL50-WRITE-HISTORY-EXIT.
002750	EXIT.

[illegible][illegible]

Command	Parameter	Value	Date
END-IF			05/25/91
ELSE			002705
ADD 1 TO			002704
TFR-RMT-ACH-ITEMS			002705
ADD WS-77-HOLD-PAY-AMOUNT TO			002706
TFR-RMT-ACH-DOLLARS			002707
IF NIGHT-ACH			002708
MOVE 'E'			002709
ELSE			002791
MOVE 'B'			002792
END-IF			002793
END-IF			002794
END-IF			002795
END-IF			002796
MOVE CP-MRCH-PHONE	TO	PDR-MRCH-PHONE	002798
MOVE CP-MRCH-CR-PHONE	TO	PDR-MRCH-CR-PHONE	002799
MOVE MMR-REMIT-ADDR1	TO	PDR-MRCH-ADDR1	002800
MOVE MMR-REMIT-ADDR2	TO	PDR-MRCH-ADDR2	002801
MOVE MMR-REMIT-CITY	TO	PDR-MRCH-CITY	002802
MOVE MMR-REMIT-STATE	TO	PDR-MRCH-STATE	002803
MOVE MMR-REMIT-ZIP	TO	PDR-MRCH-ZIP	002804
MOVE MMR-ROUTE-SETTLE	TO	PDR-MRCH-SETTLE	002805
MOVE CP-SSN	TO	PDR-CUST-SSN	002806
MOVE CF-FIRST-NAME	TO	PDR-FIRST-NAME	002807
MOVE CF-LAST-NAME	TO	PDR-LAST-NAME	002808
MOVE CF-MID-INIT	TO	PDR-MID-INIT	002809
MOVE CP-ACCT-NBR	TO	PDR-CUST-ACCT	002810
MOVE 'C'	TO	PDR-CHECK-SAVE	002811
MOVE WS-77-HOLD-PAY-DATE	TO	PDR-PROC-DATE	002812
MOVE WS-77-HOLD-PAY-AMOUNT	TO	PDR-AMT	002813
MOVE 'PAYMENT'	TO	PDR-DESCRIPTION	002814
MOVE WS-TRACE-NBR	TO	WS-77-TRACE-NBR	002815
MOVE WS-77-TRACE-NBR	TO	PDR-JUL-DATE	002816
MOVE 'H'	TO	PDR-TRANSREF	002817
MOVE PDR-JUL-DATE	TO	TRACKING-JULIAN-DATE	002818
PERFORM TRACKING-NBR-CALC			002819
THRU TRACKING-NBR-CALC-EXIT			002820
MOVE TRACKING-NBR-EMC	TO	PDR-TRACK-NBR	002821
MOVE SPACES	TO	PDR-ORIGIN	002822
PERFORM G900-WRITE-TRANHOLD			002823
THRU G900-WRITE-TRANHOLD-EXIT			002824
G200-CREATE-MRCH-CREDIT-EXIT			002825
EXIT			002826
G900-WRITE-TRANHOLD			002827
MOVE WS-LAST-COMMIT-COUNT	TO	PB-DRAFT-COMMIT-KEY	002829
WRITE PB-DRAFT-RECORD			002830
G900-WRITE-TRANHOLD-EXIT			002831
EXIT			002832

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.45	0.50	0	1
Marital status	0.65	0.48	0	1
Education	12.5	1.5	9	16
Income	1500	500	500	3000
Health status	0.75	0.42	0	1
Employment status	0.85	0.35	0	1
Life satisfaction	4.2	1.8	1	7
Stress level	3.5	1.5	1	6
Resilience score	5.8	1.2	3	7
Optimism level	4.5	1.5	1	7
Gratitude score	5.2	1.3	3	7
Self-efficacy	4.8	1.4	1	7
Hope level	4.3	1.6	1	7
Positive affect	5.5	1.2	3	7
Negative affect	3.2	1.4	1	6
Life meaning	5.0	1.5	3	7
Existential well-being	4.7	1.3	3	7
Psychological well-being	5.3	1.1	3	7
Overall quality of life	5.1	1.4	3	7







```

MOVE SPACES TO SUMMARY-REPORT-LINE.
MOVE SUM-HEADING-1 TO SUMMARY-REPORT-LINE.
MOVE ' ' TO CC-LINE
MOVE 0 TO ADVANCE-AMOUNT
PERFORM J800-WRITE-SUM-PAGE
THRU J800-WRITE-SUM-PAGE-EXIT.
MOVE SPACES TO SUMMARY-REPORT-LINE.
MOVE SUM-HEADING-2 TO SUMMARY-REPORT-LINE.
MOVE ' ' TO CC-LINE
MOVE 1 TO ADVANCE-AMOUNT
PERFORM J900-WRITE-SUM-LINE
THRU J900-WRITE-SUM-LINE-EXIT.
MOVE SPACES TO SUMMARY-REPORT-LINE.
MOVE SUM-HEADING-3 TO SUMMARY-REPORT-LINE.
MOVE ' ' TO CC-LINE
MOVE 1 TO ADVANCE-AMOUNT
PERFORM J900-WRITE-SUM-LINE
THRU J900-WRITE-SUM-LINE-EXIT.
MOVE SPACES TO SUMMARY-REPORT-LINE.
MOVE SUM-HEADING-4 TO SUMMARY-REPORT-LINE.
MOVE '0' TO CC-LINE
MOVE 2 TO ADVANCE-AMOUNT
PERFORM J900-WRITE-SUM-LINE
THRU J900-WRITE-SUM-LINE-EXIT.

```

```

* WRITE PAPER ITEMS LINE
MOVE SPACES
MOVE 'PAPER'
MOVE 'COLLECTIONS'
MOVE 'FOR'
MOVE TFR-COL-PPR-ITEMS
MOVE TFR-COL-PPR-DOLLARS
MOVE 'PAPER'
MOVE 'REMITTANCES'
MOVE 'FOR'
MOVE TFR-RMT-PPR-ITEMS
MOVE TFR-RMT-PPR-DOLLARS
MOVE SUM-DETAIL
MOVE '0'
MOVE 2
PERFORM J900-WRITE-SUM-LINE
THRU J900-WRITE-SUM-LINE-EXIT.

```

```

* WRITE CHECK ITEMS LINE
MOVE SPACES
MOVE 'CHECK'
MOVE 'COLLECTIONS'
MOVE 'FOR'
MOVE TFR-COL-CHK-ITEMS
MOVE TFR-COL-CHK-DOLLARS
MOVE 'CHECK'

```

002967	05/25/91
002968	05/25/91
002969	05/25/91
002970	05/25/91
002991	05/25/91
002992	05/25/91
002993	05/25/91
002994	05/25/91
002995	05/25/91
002996	05/25/91
002997	05/25/91
002998	05/25/91
002999	05/25/91
003000	05/25/91
003001	05/25/91
003002	05/25/91
003003	05/25/91
003004	05/25/91
003005	05/25/91
003006	05/25/91
003007	05/25/91
003008	05/25/91
003009	05/25/91
003010	05/25/91
003011	05/25/91
003012	05/25/91
003013	05/25/91
003014	05/25/91
003015	05/25/91
003016	05/25/91
003017	05/25/91
003018	05/25/91
003019	05/25/91
003020	05/25/91
003021	05/25/91
003022	05/25/91
003023	05/25/91
003024	05/25/91
003025	05/25/91
003026	05/25/91
003027	05/25/91
003028	05/25/91
003029	05/25/91
003030	05/25/91
003031	05/25/91
003032	05/25/91
003033	05/25/91
003034	05/25/91
003035	05/25/91
003036	05/25/91
003037	05/25/91









**EXIT.**

**9000-COMMIT-WORK.**

```

DISP&Y '#####WS-TOTALS=====>' WS-TOTALS
PERFORM 9200-WRITE-PAY-TBL THRU 9200-EXIT
PERFORM TRACKING-NBR-SAVE
THRU TRACKING-NBR-SAVE-EXIT.

```

```
MOVE 'UPDATING T900-PROG-CONTROL' TO STEP-DENOTER.
```

```

UPDATE T900_PROG_CONTROL
SET PC_LAST_COMMIT_KEY = PC_LAST_COMMIT_KEY,
    PC_RESTART_MODE = PC_RESTART_MODE
WHERE PC_PROGRAM_NAME = MS_PROGRAM_NAME
END-EXEC.

```

## EVALUATE TRUE

**WHEN SQLCODE = 0**

EXEC SQL

COMMIT

**END-EXEC**

**MOVE MS-PREVIOUS-SSN TO SQL-PREV-SSN**

## EXEC SQL

## OPEN TOOL

**END-EXEC**

**WHEN SQLCODE = 100**

**GO TO ERRCIK**

## WHEN SQLCODE IS NEGATIVE

**GO TO ERCHK**

**END-EVALUATE.**

**9000-EXIT. EXIT.**

**9100-LOAD-PAY-TBL.**

```

#-----#
# LOAD RESTART ENTRIES FROM THE PAY TABLE FILE.  EACH RECORD #
# CONTAINS THE INDEX POINTER, SO THAT THE RECORDS CAN BE    #
# STORED DIRECTLY WHERE THEY WERE WRITTEN FROM.  THIS ALSO  #
# PROVIDES US WITH THE MOST RECENT OCCURRENCE OF AN ENTRY.  #
#-----#

```

## OPEN INPUT PAY-TABLE-INPUT

**MOVE ZERO TO TRANFREE-TBL-ENTRIES.**

**SET NOT-END-OF-TBLIN TO TRUE.**

**READ PAY-TABLE-INPUT INTO TRANFREE-PAY-TABLE-REC**

AT END

SET END-OF-TBLIN TO TRUE.

003191	03/13/91
003192	03/13/91
003193	03/13/91
003194	03/13/91
003195	03/13/91
003196	03/13/91
003197	03/13/91
003198	05/25/91
003199	05/25/91
003200	03/13/91
003201	03/13/91
003202	03/13/91
003203	03/13/91
003204	03/13/91
003205	03/13/91
003206	03/13/91
003207	03/13/91
003208	03/13/91
003209	03/13/91
003210	03/13/91
003211	03/13/91
003212	03/13/91
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003236	03/13/91
003237	03/13/91
003238	03/13/91
003239	03/13/91
003240	03/13/91
003241	03/13/91



